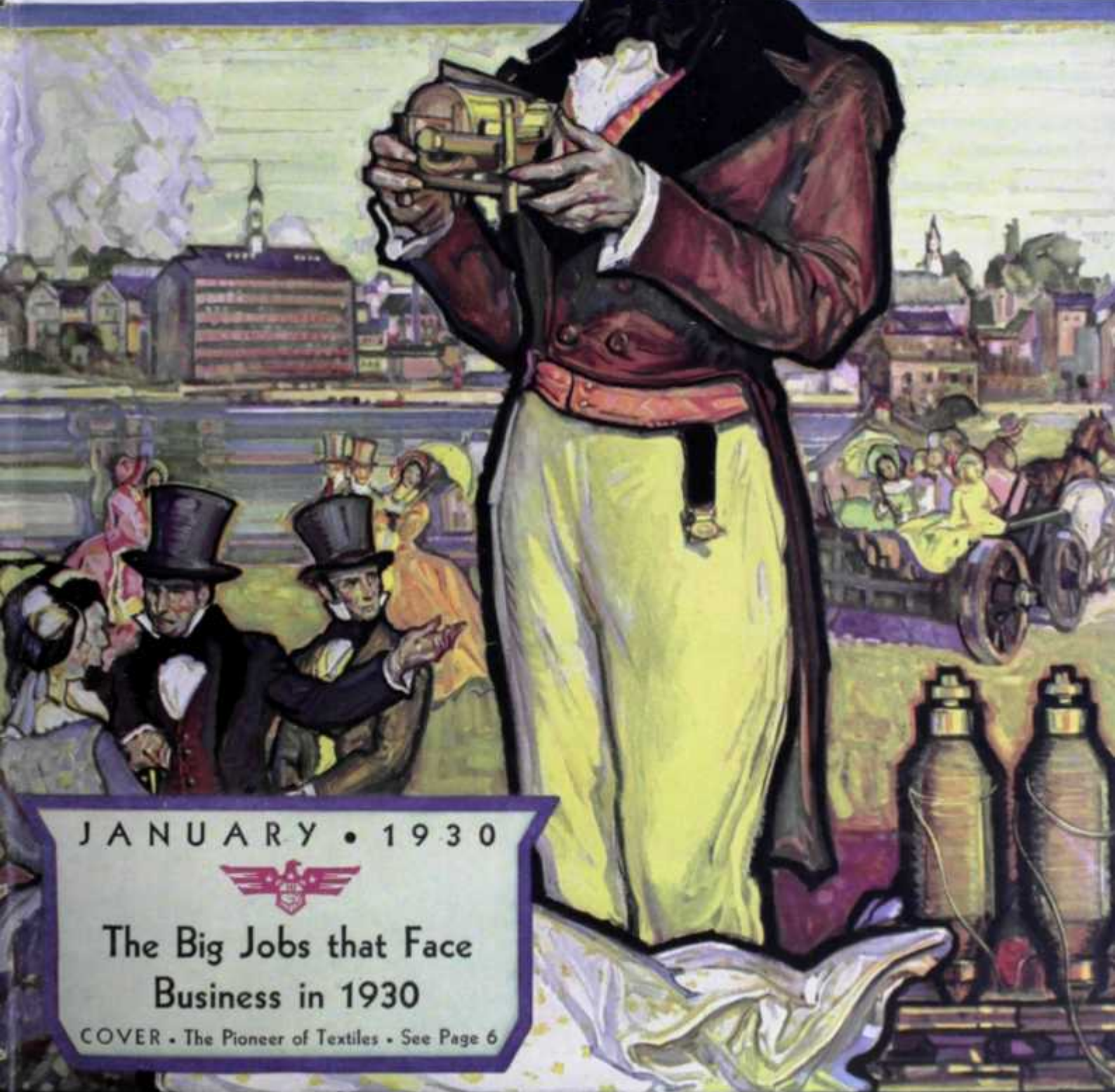


# NATION'S BUSINESS



JANUARY • 1930



The Big Jobs that Face  
Business in 1930

COVER • The Pioneer of Textiles • See Page 6

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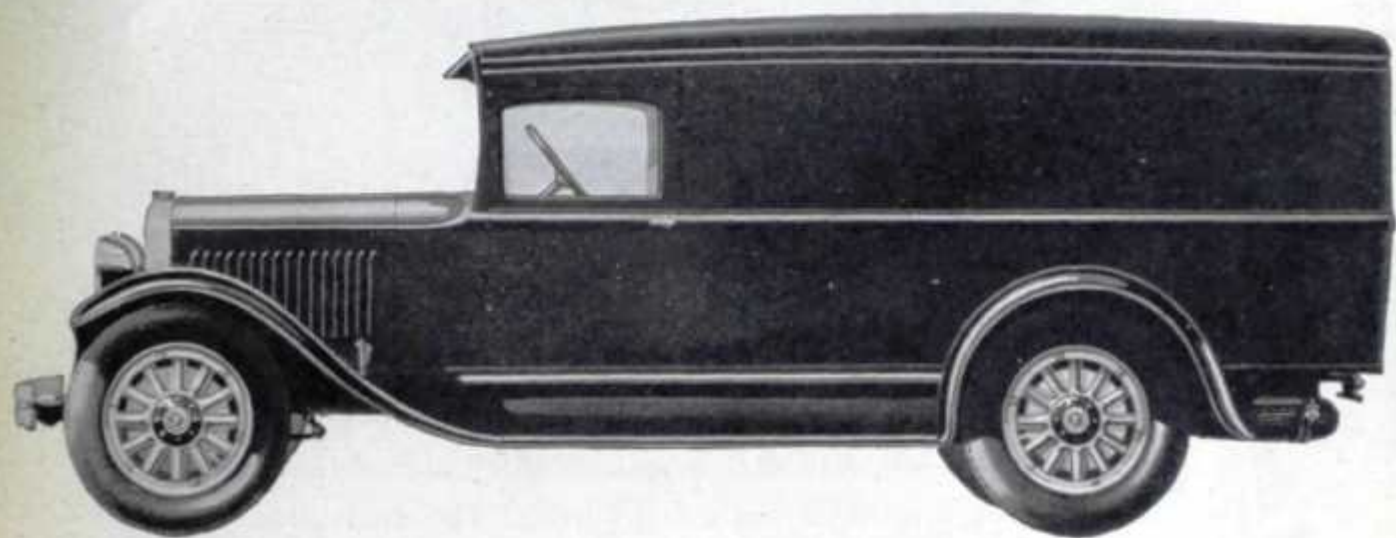
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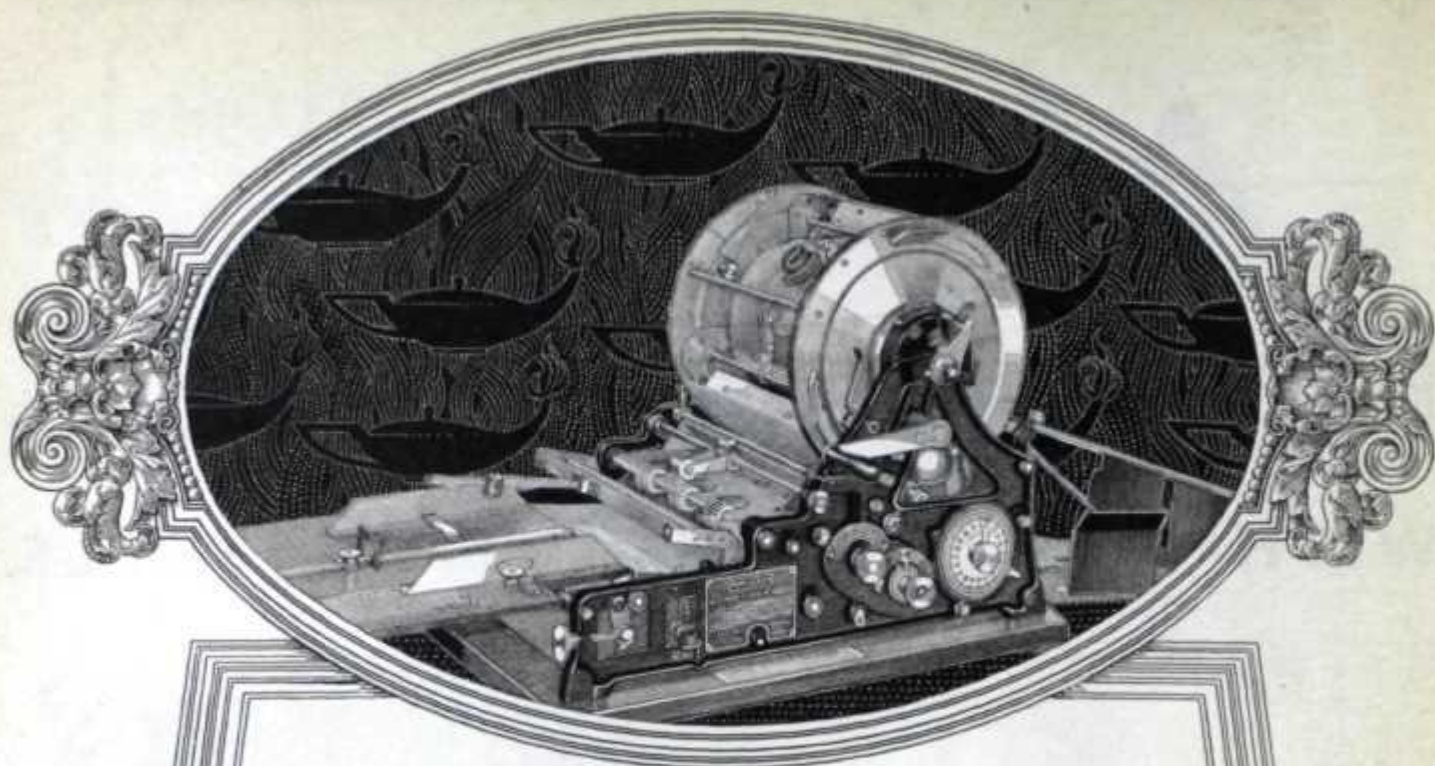
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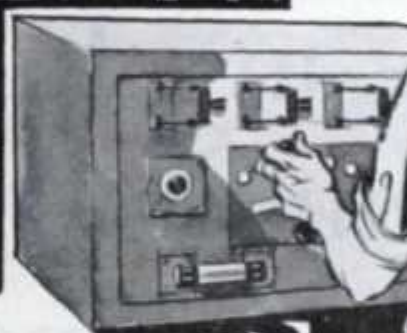
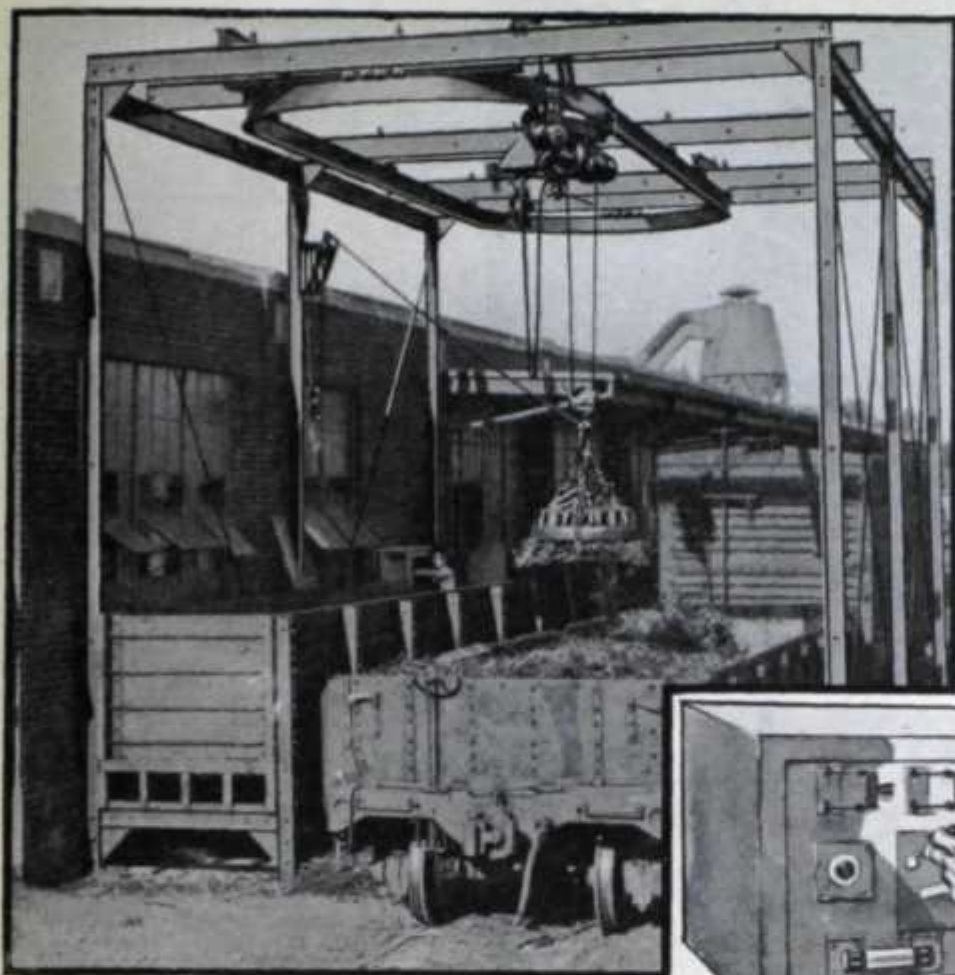
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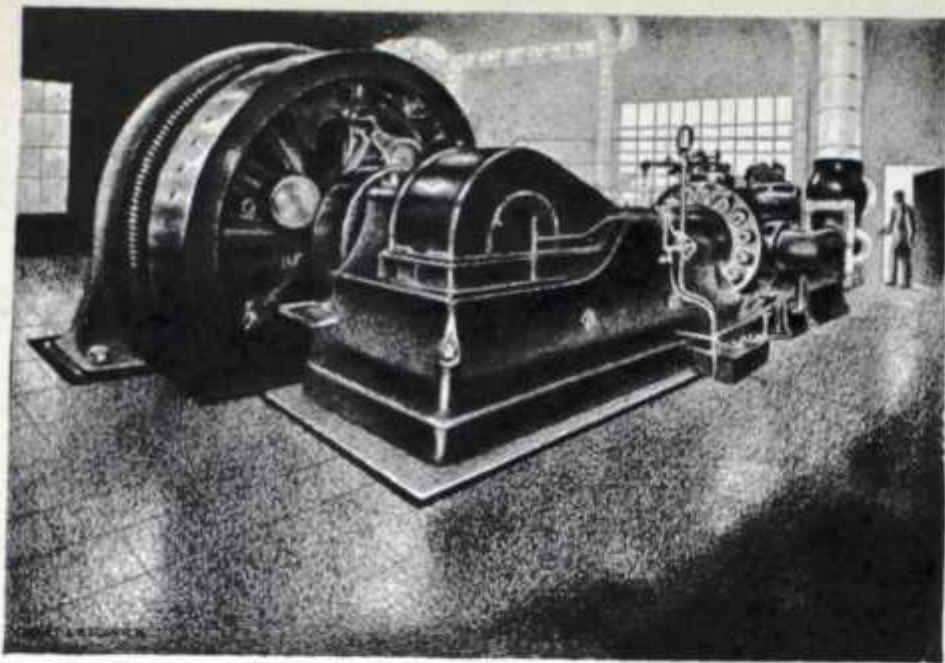
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# NATION'S BUSINESS for January

VOLUME 18



NUMBER 1

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As the official magazine of the National Chamber this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.

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## February's Authors

JOSEPH STAGG LAWRENCE, of Princeton University and the author of two books, "Stabilization of Prices" and "Wall Street and Washington," has turned his attention to the possible dangers of today's trend toward mergers. Next month he will give you a trained economist's views as to their soundness.

When William McFee expressed, in this magazine, the opinion that the United States could not operate a merchant marine, Herbert Corey, his friend, disagreed with him. Next month, Corey will offer opinions based on interviews with many shipping men, reflecting the opposite view of the matter.

P. W. Combs, advertising manager, the Atlas Portland Cement Company, recently sat in on a discussion of salesmen's faults. He has set down what he heard at that conference in an article that both salesmen and executives will find helpful.

## THIS MONTH'S COVER

*Painted by Charles De Feo*

IN A LAND swept barren of business by the War of 1812, arose a group of stern but sagacious men, the Pioneer Textile Mill Builders of New England. From the creaking water wheels which they dipped into New England's streams blossomed the gigantic manufacturing plants to which America today owes much of its prosperity.

Uplifters cried out against them because young women, lured from the farms by their promise of steady wages, fell—let us quote—"under the yoke of the factory system," and were introduced to "the perils of the city."

These pioneer mill builders accomplished the first corporate merger in this country, engaged in the first industrial research and built the first vertical trust. They blazed the trail for nearly every industrial or financial step that we of today regard as modern.

They also blazed a trail in social welfare work. Their mills gave land for churches, for schools and hospitals. They established libraries, reading clubs, an industrial savings bank and decent homes for their workers.

Their wise hands guided American industry's infant steps along that amazing trail it was to tread in the years to come. To them NATION'S BUSINESS dedicates this cover.





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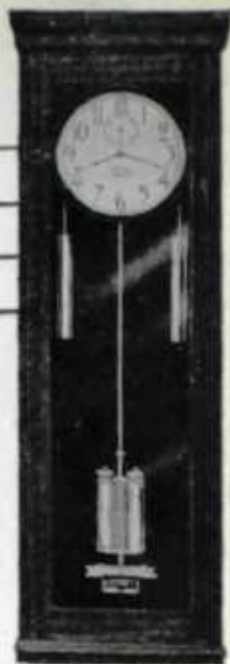


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## Partners for Prosperity

**F**OR GENERATIONS we have been accustomed to look upon Business and Government as hereditary foes. Business, we were early taught, was always trying to evade the law; Government was continually trying to catch Business at it. If we lost sight of the eternal conflict for a moment, some politician brought us to our senses.

It was as if we had two sets of guiding principles—one for the youth who entered business; one for the youth's brother who entered politics. One was led to feel that his political economy must be literally "political" the other that his economics were "commercial"—and that business and money-grubbing were one and the same.

Our one-time zeal to keep State and Church separated now expended itself on the separation of State and Business.

We were told that Business aims only at making money, while Government aims at securing the public welfare—as if the two objectives were hopelessly irreconcilable with the public good.

But it is becoming more and more apparent that Business represents a public trust. That trust is understood better day by day. Few knew—or cared—what the elder Morgan meant 20 years ago when he wrote to the Pujos committee, then investigating the "money trust." Today we sense the deeper significance of his words, when he said:

To us it seems as little likely that the citizens of this country will fill Congress with rascals as it is that they will entrust their business and financial affairs to a set of clever rogues. The only genuine power which an individual, or a group of individuals can gain is that arising from the confidence reposed in him or them by the community. These are axioms which it seems almost idle to repeat. They apply to all business, but more emphatically, we believe, to banking than to any other

form of commerce. To banking the confidence of the community is the breath from which it draws its life.

This precious metal of confidence has recently been elevated to headline position in the news. The nation in casting up accounts, is asking, "Where does Business stand? Where does Government stand?"

The unqualified answer is that they stand together. Through the President the Government has spoken. Through a host of its leaders, Business pledges its resources and resourcefulness to maintain the momentum of industry.

The two forces are working hand in hand as in wartime.

We have long realized that we are a nation. It is heartening to be reminded that we are a united people.

If this partnership of Government and Business bears fruit—and it will—the history of America written a century hence will devote one chapter to the new era. But if Business fails to meet the test of responsibility, or if government leaders fail to meet the test of working with Business, then the experiment will be accorded only a footnote in small type on that history's page.

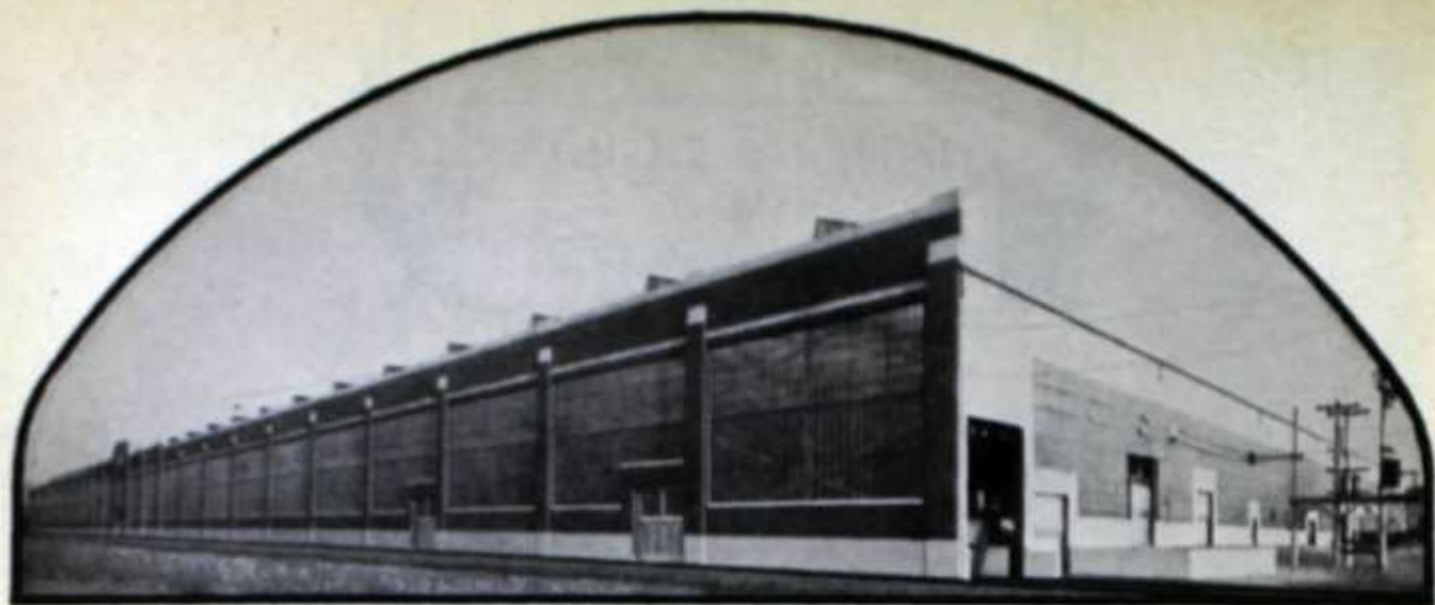
We believe that both will make common cause for the common good.

Invitation, a challenge, an opportunity—all are there. Julius Barnes, to whom the President has turned over the job of mobilizing Business, puts it soberly:

It would be an inspiration to all who believe in self-government if there could be constructed now an example of teamplay so as to show that voluntary service is superior to government compulsion.

*Merce Thorne*





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# NATION'S BUSINESS



Published at Washington by the Chamber of Commerce of the United States  
MERLE THORPE, Editor

## As the Business World Wags

THUS WE MAY SEE, QUOTH HE,  
HOW THE WORLD WAGS—*As You Like It*

### Double Quick to Prosperity



ON Thursday, October 24—Black Thursday—prices on the New York Stock Exchange went into perhaps the most spectacular decline in the history of American finance.

On Thursday, December 5, just six weeks later, more than 450 leaders of American business met in the council hall of the United States Chamber of Commerce for a "national business survey conference."

Keep those dates in mind for they mark a new experience for American business, a new revelation of the speed with which its leaders can act. With the encouragement of President Hoover and the administration, men came from all quarters of the country and talked freely and frankly of the present position, the future plans and hopes of their industries.

An inspiring meeting, one that is bound to be helpful and one that set a new speed record for American business in facing an emergency by prompt action.

### "Collective Common Sense"



THE keynote of the December 5 meeting has been described as "collective common sense." There was no desire to paint an unreasonably rosy picture, no Pollyanna spirit.

Something had happened. Great declines in securities cannot take place without a reflex action on industry. How serious was this reflex? What was best to be done to lessen the shock?

These were questions which the gathering came prepared to answer and their short public talks were supplemented by other written and more complete reports.

When one man asks another "How's business?" he's apt to have in his mind an unspoken second question: "How much do you really know about it?"

The question is answered for the business survey by the very names of the men who spoke. Here are some

picked at random from the list of those who spoke:

JAMES A. FARRELL, president, United States Steel, for steel.

MATTHEW S. SLOAN, president, New York Edison, for the utilities.

JOHN G. LONSDALE, president, Mercantile-Commerce Bank & Trust Company of St. Louis, for banking.

ALVAN MACAULEY, president of Packard, for the automotive industry.

FREDERICK H. ECKER, president, Metropolitan Life, for insurance.

Add two dozen more of like standing and you have the group who spoke at the meeting. None can question their knowledge of the industries they represented. None can doubt that each spoke with frankness. From such a gathering of such men, good is bound to come.

### A Presenting Of Facts



THE short public presentations of the state of business in the first week of the last month of 1929 were presented without coloration, with careful consideration of facts and figures.

There was no desire to overstate. Here's a good sample of the care with which the statements were made. E. M. Allen, president of the Mathieson Alkali Works, is speaking for the chemical industry:

The different branches of our industry are planning on the following business for 1930, as compared to 1929:

Explosives, 2 per cent to 3 per cent less; dyes, about same; rayon, decidedly larger; lacquers, alcohols, solvents, 10 per cent to 15 per cent less; paints and varnishes, 5 per cent less; artificial leather, 10 per cent to 15 per cent less; ammonia, larger; soda ash, larger; caustic soda, decidedly larger; chlorine, larger; sulphur, sulphuric acid, larger; fertilizers, about same; phosphoric acid, decidedly larger; patent and proprietary medicines and compounds, larger.

The meeting was held just as this issue of NATION'S BUSINESS goes to press. There is neither time nor space to give a complete account of the gathering. Nor is there a need. The daily press has dealt with it fully



and the Chamber has distributed promptly and widely a carefully prepared summing of what was said at the meeting. If any of our readers has not seen this report we should be glad to send one to him.

### Business Bound Together



"MIND your own business" is a maxim almost as old as human conversation.

Cervantes put it in the mouth of Don Quixote and probably took it

from the common speech of the day.

But business is learning that it is not enough to mind one's own business. It is necessary to mind the other fellow's business. That was a part of the purpose of the great gathering of business leaders which met on December 5 with the United States Chamber of Commerce as host.

A chief concern of that gathering was not "how is my business?" but "how is your business?" A list of industries represented begins with "advertising" and ends with "wholesaling," and it would not be impossible to point out the links that connect any two of them.

Mankind once thought that the way to salvation was through solitude and exclusion. To cut oneself off from one's fellow men, to dwell alone in a cave, to fast, these led to holiness. Business once had something of the same feeling. Secrecy was part of its stock in trade. The way to profits was not to let your competitor know what you were doing.

"Communism" as a political or an economic theory has an evil sound, but if we take the word back to its Latin sources and think of it as meaning "bound to-

gether" we see that "communism" is a part of modern business; that business may be both independent and interdependent.

### Some Notes on the Market



TO any who seek a text upon which to base a sermon on the recent stock market mess we suggest the following from Pilgrim's Progress:

He felt in his bosom for his roll . . . but he felt and found it not.

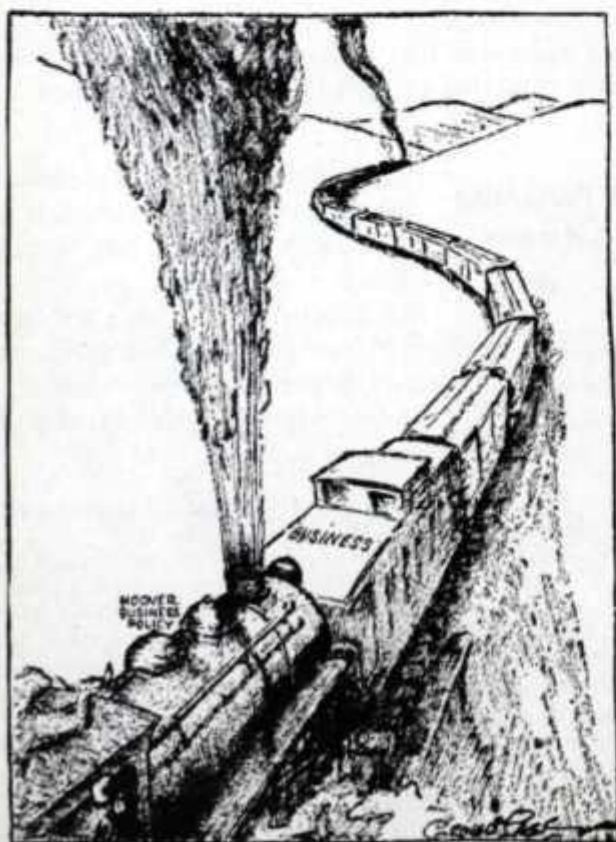
Careful statisticians who have begun the inevitable work in the wreckage estimate that the market was supported by a billion dollars in money and by twelve billion words of reassuring statements. There were those who felt with Hamlet "the lady doth protest too much."

The rumors of bad business seemed to center chiefly on reputed cancellations of fur coats. Everybody had heard that So and So's Store had had 49 fur coats cancelled. The same eminent statisticians figure that if all the fur coats cancelled were added up or laid end to end there would not be enough fur-bearing animals in North America and Asia to fill the bill.

The *Manchester Guardian* used a good simile when its financial editor wrote:

A big blister has burst on the skin of America. It looks uglier than an internal ulcer, but it is not nearly so dangerous.

"Beneficial readjustment" is a fine sounding phrase to the 99 who were not in the market, but try it on the one who has lost money! Or try telling the man who has been run over by a steam roller smoothing out the road that it's a "beneficial steam roller."



PAGE IN THE LOUISVILLE COURIER JOURNAL

The Engineer



TELEST IN THE WASHINGTON DAILY NEWS

All Dressed Up and No Place to Go

# The Big Push as the



"Supporting the market" sometimes seems to a cynical outsider like waiting for the fruit to ripen enough to drop and then eating it.

Reading the White House statements that there were great opportunities now to push "lagging construction work," our most patriotic citizen is going ahead with the bridge work which his teeth have needed for some time.

### On Making Mistakes



and, if so, by how many.

To the editor who is suffering from that form of depression there is no better antidote than to make one first rate, egregious blunder—a blunder which no one should have made and no one can explain. By the time he's ceased hearing from those who have caught his error and are prepared to rebuke him in private and if need be to pillory him in public, he will realize that his publication is read.

How do we know? Because on this page in November we took that flier of the seas, the Bremen, from its rightful owner, the North German Lloyd, and wrote "the Bremen of the Hamburg-American Line."

The November issue was not long in the mails when the first protest was received, an anonymous one, merely a clipping with the error outlined by a red lead pencil. Then other protests, more formal, came and mid-December has not ended them. To all who noticed and wrote and to all who noticed and didn't write, we bow

THERE come to all editors—certainly to all editors who have not grown calloused—moments of wonderment if what they write or what they gather from other writers is read

a shamed head and plead guilty. And we have no alibi, unless we find it in the remark attributed to Larry Doyle, second baseman on some of John McGraw's best teams.

Mr. Doyle made an error, a good resounding, soul-satisfying error, one which not only cost a game but the world series.

As Larry met his lugubrious manager a moment later in the dressing room, he beat him to it by exclaiming: "Well, you got to hand it to me, John, I pull 'em where they count!"

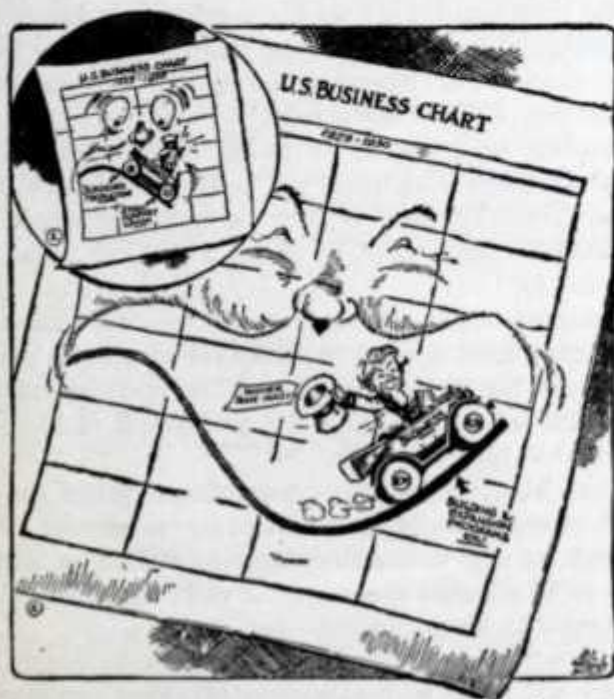
### A \$600,000,000 Retail Force



THE proposed merger of Sears Roebuck and Company with the J. C. Penney Company will make according to the newspapers "the largest merchandising organization in the country." Superlatives are always dangerous and perhaps some one lurks around the corner to confront us with figures to show that some other merchandising organization is larger, but the two companies will sell this year more than \$625,000,000 worth of goods, a vast sum even in these billion dollar days.

What does it mean to business? A new and powerful figure in the field of retailing.

Independent merchants, who saw both the Sears Roebuck catalog and the Penney store as ruthless invaders of their once peaceful trading fields, may now see the two in league and may feel that for them the old mathematical rule that "the whole is equal to the sum of all its parts" no longer holds good and that the new combination may be more dangerous than its two components. And there are many manufacturers who



WHEELER IN THE HIGH POINT (N. C.) ENTERPRISE

Face Lifting Expertly Done



WHEELER IN THE SEE MOVIES REGISTER

Going Into a Huddle!

# Cartoonists View It



are sure to look with uneasy minds when they see a combination of merchandisers which can sell \$625,000,000 worth of goods a year.

Suppose Sears Roebuck plus Penney sell hammers, the ordinary household hammer that Everywoman wants around the house—something to pound with. Now Everywoman buys hammers largely by price. What she wants is a 25-cent hammer, or a 50-cent hammer, not a hammer built to certain specifications of a certain quality of steel and a fixed weight of head.

How many such hammers can a Sears Roebuck-Penney Company sell by mail and in their 1500 stores? A hundred thousand? Half a million?

Whatever the figure, it would be a tremendous order for a hammer maker, but how sharp a bargain can the buyer drive?

And how great is the impetus that sends the hammer maker who is led into the high places to wonder what the future holds and to consider the possible merger of himself and other hammer makers to present a stronger front to so great a mass of buying power?

### The Penalty of Criticism



FRED I. KENT, a director of the Bankers' Trust Company and an American authority on some phases of finance, had the temerity in a speech in New York on November

11 to suggest that the failure of the Senate to act on the tariff muddle was a factor in the stock market decline.

A properly outraged Senate through its committee on lobbies and lobbying called upon Mr. Kent to explain his criticism. It is fair to note that Mr. Kent appeared voluntarily in answer to the committee's request. It is equally fair to ask whether the Senate committee was actuated solely by a desire to add to its information about lobbying.

It is difficult to avoid a feeling that to call a citizen upon the carpet because he has criticized the legislative arm of the Government is somewhat contrary to that faith in free speech to which this country has been committed.

It is still more difficult to avoid a resentment at such questions as these (the quotations are from the *New York Times*, not the official record):

"You have had no trouble getting your liquor since prohibition, have you?" asked Senator Caraway.

\* \* \*

"You are not related to Grundy, are you?" asked Senator Borah. The witness had never met Mr. Grundy.

"You ought to do it because you are kindred spirits," the Senator said.

### Investigating the Investigators



ON SEVERAL occasions in recent years the Senate, by resolution, directed the Federal Trade Commission to investigate the cotton seed industry to determine if there were a combination to fix prices of cotton seed. In March, 1928, the Commission reported that "no evidence was secured tending to show that the price of

refined oil (cottonseed oil) was established by other than bona fide transactions."

Nevertheless the Senate has urged the Commission by further resolutions, fathered by Senator Heflin of Alabama, to dig deeper to find a combination to fix the prices of cotton seed.

Nor is the Senate alone in its activity. Wright Patman, Representative in Congress of the first district of Texas, looks distrustfully at the Federal Trade Commission and, perhaps, at the activities of the Senate on behalf of the cotton growers, and would have the House name a committee of three which not only shall conduct "a thorough investigation" into the activities of "all—engaged in purchasing or handling the products produced from cotton seed," to find the combination, to fix prices, but which is "specially directed to investigate,"

Whether the Federal Trade Commission of the United States has assisted, aided, or otherwise encouraged representatives of cottonseed oil mills in fixing the price of cottonseed or in entering into agreements the effects of which were to fix the price of cottonseed, or doing any act in violation of the law of the United States, or detrimental to the interest and rights of growers of cottonseed.

Let's investigate the investigators! And if Senator Heflin wants to carry on why should he not propose a senate committee to investigate the house committee which investigates the Federal Trade Commission which was instructed by the Senate to investigate the cottonseed industry?

### High Wages and Prosperity



HENRY FORD, leaving the White House conference of industrial leaders, announced that he proposed as a contribution to continued prosperity to raise the wages of workers in the Ford plant. He kept his word and on December 2 announced that the minimum daily wage in the Ford plant would be \$7 instead of \$6 and that other increases would total \$20,000,000 a year.

Guesses, or estimates—a more important-sounding word for guess—put the Ford production for 1930 at about 2,000,000 cars. If then he increases wages by \$20,000,000 there must be about \$10 a car to be accounted for.

There are three obvious ways in which a manufacturer may meet a wage increase. He may raise prices to absorb the difference; he may cut costs in making or selling, or he may take the money out of his own or his stockholders' profit.

That Mr. Ford, having just reduced prices on his product should raise them, is not to be believed. Will he then be able so to reduce costs of making or selling cars as to equalize the wage increase? Or must he be content with lesser profits?

Interesting questions to the answers to which industry will await with eagerness. Mr. Ford can always be counted on to do something striking. One competent, but somewhat jocular, observer of the automobile industry said the other day:

"Oh, well, perhaps Mr. Ford is going to sell his cars by mail."



# SINCE LAST WE MET



A Business Record November 11 to December 9

## NOVEMBER

- 11 • **RESOURCES** of the 7,473 national banks on October 4 were \$27,924,310,000, an increase of \$484,000,000 over June 29, when 7,536 banks reported, and a decrease of \$1,001,170,000 over October 3, 1928, when 7,626 reported.

**SAVINGS BANKS** reports as compiled by the American Bankers' Association report that on June 29, 1929, deposits had decreased \$195,000,000 from the same date in 1928. The first decline in 20 years.

- 13 • **THE ADMINISTRATION** proposes a reduction in taxes on corporation and personal incomes to total \$160,000,000.

**STOCK PRICES** go further down; someone offers to buy 1,000,000 Standard of New Jersey at 50 and the Stock Exchange sets out to find who's selling.

**THE SHIPPING BOARD** sells 25 laid up cargo ships to Russia for coastwise service. Price \$1,155,000. That's \$900,000 higher than their price as scrap.

- 14 • **PARIS** reports that General Motors is to control Citroen and Peugeot—the former making 85,000 cars and the latter 45,000.

**STOCK MARKET** turns upward and rediscount rate is cut to  $4\frac{1}{2}$  per cent. Broker loans down to \$4,170,000,000, lowest since April, 1928. The Department of Labor reports no indication in October of any falling off in employment, which is at a high level.

**UNITED FRUIT** buys Cuyamel Fruit. Yes, they'll have bananas. The former will import nearly 35,000,000 stems this year and the latter 10,000,000.

**FOR FIRST** 10 months of 1929, life insurance written by 44 leading companies was \$10,609,888,000 compared with \$10,023,573,000 in the same months of 1928.

- 15 • **THE MARKET** "ups" some more. A standing order is placed for 200,000 shares of Steel at 150.

**HOOVER** calls conference of industry, agriculture and labor to discuss means to maintain the "status quo ante stock decline."

## NOVEMBER

- 17 • **DUTCH AND BELGIAN** diamond cutters shut down or cut down. An obvious stock market result.

- 19 • **RAILROAD** men halt on the way to annual convention in Chicago to meet with Mr. Hoover and to assure him that the railroads are not to reduce their expenditures. They spent \$800,000,000 in betterments in 1929 and will better the betterments in 1930.

- 21 • **TWENTY-TWO** leaders of general business meet with Mr. Hoover—form a temporary advisory committee, and take the first step toward a general meeting of American business to discuss ways and means of keeping straight ahead. Ford leaves the meeting to announce that he'll raise wages. Scolds business men for ticker watching.

- 22 • **LEADERS** of the construction industry formed this day's Hoover meeting.

**AN INTERSTATE** Commerce Commission examiner reports that the railroads, having carried 875,500,000 passengers in '26 and 788,000,000 in '28 will carry still fewer in '29. Blame the bus!

- 24 • **LEADERS** of farm organizations meet with the President. Some of them suggest lower interest rates for farm securities and federal aid for roads from main highways direct to farms.

- 25 • **THE POSTMASTER GENERAL** says he will ask bids for 13 ocean mail routes calling for 40 new ships within 10 years, and the laying of keels of 17 within 6 months.

**FEDERAL POWER COMMISSION** says regulation of utilities is primarily a state, not a federal, function.

- 26 • **THE I. C. C.** values the New York Central at a billion and a half. Commissioner Eastman, dissenting, doubts if the Commission lived up to the ruling in the O'Fallon Case.

- 27 • **UTILITIES LEADERS** promise Mr. Hoover a \$2,000,000,000 expansion program in 1930 and are going to stick to it.

**WARNER BROTHERS** and the Fox in-



# SINCE LAST WE MET

## NOVEMBER

terests are sued by the federal Government for violating the antitrust act.

- 29 • **THE NEW YORK TIMES** table of stock prices shows that the shares of 240 companies dropped in November \$5,500,000,000, making a loss of nearly \$19,000,000,000 in September, October and November.

SIXTY-ONE RAILROADS reported their October returns show a drop in October of 7.8 per cent as against October '28. The railroads for 10 months will show a substantial gain over the 10 months of '28.

- 30 • **FEDERAL RESERVE** district reports stress cold weather as having stimulated trade. A dropping thermometer counteracts a dropping stock market.

THE MERCHANT FLEET Corporation shows a \$13,600,000 operating loss in the fiscal year '29, but points out that it lost more than \$16,000,000 the preceding year.

INTERSTATE Commerce Commission points out that holding companies present serious problems in any consolidation plan. The Alleghany and Pennroad companies are cited as examples.

## DECEMBER

- 1 • **THE POST OFFICE DEPARTMENT** reports a deficit of \$85,000,000 for the fiscal year ended June 30, 1929. The preceding year it was \$32,000,000. Free service for government departments, franked mail and air and ocean subsidies are blamed.

NEGOTIATIONS under way to combine Sears Roebuck and Company and J. C. Penney Company. Between them they will sell in 1929 \$625,000,000 worth of goods and will have a chain of more than 1500 stores blanketing the United States.

- 2 • **FORD** raises wages \$20,000,000 a year. Minimum \$7 a day.
- 3 • **THE FEDERAL** budget goes in. For the fiscal year '31 we're to spend \$4,100,000,000. In the fiscal year '30 we will probably spend \$4,023,000,000. In the fiscal year '29 we actually spent \$3,850,000,000. Anyway we shall have a surplus.

- 4 • **THE TREASURY** offers \$325,000,000 of 9 months certificates at  $3\frac{1}{8}$  per cent. It paid  $5\frac{1}{8}$  for its money in June.

- 5 • **CIGARETTE** price war starts again. The United cuts Camels, Chesterfields, Luckys and Old Golds to 12 cents. Last month they agreed with other mass retailers to make them 15 cents.

The National Chamber is host to 450 business leaders to tell each other that there is very little wrong with our business world. (See leading editorial on page 11).

SIR HENRI DETERDING, British oil producer, to the Petroleum Institute proposes "an association of cooperation on the basis of permanent production with the assistance of such distribution organizations as are willing to cooperate."

- 7 • **DODGE CORPORATION** estimate of private construction for 1930 is \$8,435,000,000. In 1928 construction totalled \$8,764,000,000. Estimates for 1929 are \$7,810,000,000.

A SURVEY of retailing opinion by the United States Chamber of Commerce shows no increase of cancellations or unemployment. Collections good and holiday trade proceeds as usual.

GENERAL ELECTRIC splits its stock 4 for 1 and will have 28,850,000 shares outstanding. Only General Motors with 43,500,000 has more among listed stocks.

SWIFT AND COMPANY, like General Electric, splits its stock 4 for 1.

- 8 • **THE LEVIATHAN** talks by telephone to New York and Atlantic City. Commercial service from ship to shore with rates from \$7 to \$11 a minute will soon follow.
- 9 • **PUBLISHERS ASSOCIATION**, fearing increase in newsprint prices, tells its directors to "see what the government can do."

OWEN D. YOUNG tells Senate Interstate Commerce Committee monopoly of our external communication is essential even if government-ownership were necessary. Suggests that competition is causing telegraph communication to lag behind telephone service.





—William Butterworth

## The Interrelation of Business

By WILLIAM BUTTERWORTH

President, Chamber of Commerce of the United States

**A**LARGE part of the task of the United States Chamber of Commerce lies in making plain to one field of industry the questions and the problems that confront another; to let the banker see that the tasks which face the retailer concern him also, and the retailer understand that things which loom large upon the horizon of the banker are his business as well.

This knowledge of each other helps greatly to make possible that spirit of cooperation and team play in business for which the National Chamber stands and of which we have been having so fine an example in the conferences of business men, set on foot by President Hoover and sponsored by our organization. Having suffered a sort of an economic

# The Big Jobs Business Faces in 1930



BUSINESS MEN, like nations, no longer can claim a splendid isolation. They stand or fall as they coordinate themselves with their neighbors and their neighbors' problems. We present here a summary of the problems that will claim business attention in 1930. Contributed by the National Chamber's Department Managers, it is perhaps the most authoritative chart of the business channel that can be compiled



William Harper Dean  
Manager, Agricultural Service Department





**F. Stuart Fitzpatrick**  
Manager, Civic Development Department

indigestion in the stock market, the business of the country has met, talked things over and gone on its way with renewed confidence.

A man, whose work brings him into contact with business men in many lines of industry, said to me not long ago that he constantly found that those with whom he talked were familiar with their own work, but were not well informed of their industry as a whole, and were sometimes distressingly ignorant of what was going on in other industries. They oftentimes failed to see beyond their own desks. They were so close to their own work and so busy with it that they failed to pay proper attention to the important things happening in other businesses which might easily bring about changes and set up forces to affect their own business.

It is to bring about a knowledge of those exterior forces which have so great an influence on every man's occupation and to carry out the purpose of the Chamber, as I have outlined it above, that NATION'S BUSINESS has asked the heads of the departments of the United States Chamber to set forth briefly what are the things most likely to be of concern to the industries with which they are dealing.

### Foresight, not hindsight

IF WE could move forward a year and, from the vantage point of January 1, 1931, look back over 1930 we could then say, "Manufacture devoted much of its time in 1930 to working on industrial relations and elimination of unnecessary styles," or "Coal and oil have concerned themselves with the task of regulating production to consumption." It is to anticipate these headlines of 1930 that these pertinent summaries have been prepared.

They are written not primarily that the insurance man may learn what things seem most likely to come

up in insurance for discussion and action in 1930, but that the man who mines coal and the man who makes radios may know of these insurance questions and fit them into his own business.

This is the season of perfunctory prophecy, when business leaders are invited to go through the customary form of saying that the "fundamentals of business are sound, and I look for a 1930 which shall be if anything but slightly less prosperous than 1929."

NATION'S BUSINESS has departed from that precedent and has tried here to set forth those things with which business may deal. I believe that the business reader will find them of the utmost service.

**E. W. McCullough**  
Manager, Manufacture Department



**John J. O'Connor**  
Manager, Finance Department

UNDERWOOD & UNDERWOOD, WASHINGTON



## Agriculture Watches Farm Board

By WILLIAM HARPER DEAN

Manager, Agricultural Service Department,  
U. S. Chamber of Commerce

CURRENT and prospective policies and activities of the Federal Farm Board will command the interest and scrutiny of American agriculture during the next year. That interest will not be confined to those engaged in agricultural production, but will be found as well among the ranks of business enterprises directly and indirectly concerned with the marketing of agricultural products.

Agriculture will continue to ask whether nation-wide marketing operations such as are being encouraged and organized by the Federal Farm Board will in fact solve the problems with which cooperative associations as well as individuals in the past have had to contend.



E. L. Bacher

Manager, Foreign Commerce Department



Terence F. Cunneen

Manager, Insurance Department

Privately owned marketing agencies are asking and will continue to ask whether the Farm Board's policies will eventually eliminate private business from the field of distribution of agricultural products. They will question whether they can compete with nation-wide cooperatives organized under the guidance of the Farm Board and financed by federal funds at low interest rates.

Interest in the possibilities of large-scale farming undoubtedly will continue to grow. Accelerated mechanization of agricultural production is developing an intense competition between areas where such mass-production methods, with attendant lowered production costs, are possible and those sections where limitations upon the size of farm units make application of such methods difficult.

Already there are discernible shifts from high to low-cost

production areas in certain staple products. Undoubtedly agriculture as well as federal and state agencies will attack this question with increased energy in the coming year.

Not the least important consideration before American agriculture is the tariff. Whether the tariff bill as finally enacted will carry schedules of benefit to those branches of American agriculture operating on a domestic basis or whether such increases as are made in agricultural schedules in effect will be offset by increases in the schedules of imported commodities which the American farmer buys, will be the question uppermost in the minds of our farmers.

## Trends In Municipal Development

By F. STUART FITZPATRICK

Manager, Civic Development Department,  
U. S. Chamber of Commerce

THE President of the United States recently called business and industrial leaders together to discuss ways by which business conditions may be maintained on the present high level. The President recommended that necessary public works of a national and local character be carried out with as little delay as possible.

For the first time in many years chambers of commerce have before them an outstanding activity which will benefit business and industry in a dual capacity. In its first capacity, the construction of public projects will provide work for many now unemployed and thereby increase the purchasing power of a locality with its corresponding benefits. In its second capacity, the development of a community by means of improved sanitation, water supply, pavements and other public works will make the conduct of commerce and industry more efficient and therefore redound to the general welfare.

A program for municipal development, particularly when





E. D. Borden

Manager, Domestic Distribution Department

W. DuB. Brookings

Manager, Natural Resources  
Production Department

rapidly carried out, is fraught with many dangers. The paving of streets in territory which is but partially built up while many streets in the center of the city remain dirt roads is a privilege granted a few at the expense of many. A highly developed recreational system is desirable from the standpoint of improving the physical and moral fitness of a people, but if such a recreational system is developed at the expense of sanitation, the net result will be a municipal loss instead of a gain.

The wise development of a municipality with its corresponding advantages to business and industry must be measured by the efficiency of all its public services, rather than by the efficiency

of one or more separate services. Of particular interest to local communities are systems of sanitation, recreational facilities, zoning, regulating the parked automobile, and a procedure by which a community may determine the order of importance of the various projects under consideration and a method by which they may be economically carried out.

## Voluntary Chains Loom Large

By E. D. BORDEN

Manager, Domestic Distribution Department,  
U. S. Chamber of Commerce

THE new alignments in distribution, one of which is the voluntary chain, will be leading topics in this field in 1930. Independents group together, usually in conjunction with one wholesaler or more, to form a voluntary chain. In effect they act as chains. Their growth is something for manufacturers as well as retailers and wholesalers, to ponder well.

The action of these voluntary chains, which are not well named, will be felt keenly by wholesalers outside the picture, in some sections and lines. It is usually true that big innovations begin in the food lines, and then take root in drugs, hardware, and other fields. Some of the voluntary chains outside the grocery field call for a set-up of warehouses which act as extraordinary wholesaling units, as these warehouses serve only member wholesalers.

The merging of manufacturers in allied lines is probably a move to meet the situation created by chains and other mass merchandisers. Such a union gives greater momentum, as it makes possible the handling of full lines at lower costs. A

*(Continued on page 180)*



A. B. Barber

Manager, Transportation and Communication Department

UNDERWOOD &amp; UNDERWOOD, WASHINGTON



# Machines That Make Machines

By HERBERT COREY



Presto, chango! And another steel sheet has been transformed into an auto fender

**H**AVE seen the invisible and touched the intangible. If I could exaggerate the story I would. But the facts are so big that it isn't possible to measure them. I want to make ballyhoo like a fakir at a fair. That's the measure of my enthusiasm.

For the first time—and this is honest—I am beginning to understand the dignity and magnificence of our country. More than that. I am beginning to glimpse the vision that lies ahead. If there is too little coherence and too many I's in what is written it cannot be helped. This is not a news story but the record of revelation.

Conviction, conversion—hallelujah—came when I looked at the shadow of a

line one ten-millionth of an inch wide. On that narrow foundation is being erected the structure of the future.

## Other factors enter in

NOT that I am going to give too much credit to the machine toolmakers of the United States. Not too much. Other factors have aided in urging on our amazing progress and in creating our incredible minds that slough off the bonds of tradition; a market that gasps for more and more and courageous bankers and the thousand other elements of which we all know. But the element which few of us know is built on that line which is one ten-millionth of



**MACHINES** bolt our flour and bake our bread. Machines print our paper and plot our business progress. Machines steer our ships and rear our skyscrapers. But behind this multiplicity of machines are other machines, machines that have sired this amazing brood, machines that are even more marvelous than their progeny—

an inch wide. I shall try to regain my reef composure long enough to state the facts in the case.

I visited the Second Machine Tool Builders Exposition recently held at Cleveland. Every one knows what a tool is. Not so many know what a machine tool is. To my non-mechanical mind a machine tool is merely a larger and noisier machine. I had never differentiated between the machines that make things and the machines that make the machines that make things.

Consider for a moment what that implies. Seven thousand cars run daily from the production line of an automobile manufacturer, complete to paint and whistle. Seven thousand men, be the same more or less, are engaged in making them. Without machines, 70,000 men, 100,000 men, could not turn out



7,000 cars daily. New York is planning a skyscraper to be 91 stories tall. If there were no machines, skyscrapers would peter out at 90 feet. An oil burning locomotive two men high and 20 horses long yanks a mile of freight cars across the passes of the Rockies. Without machines transcontinental travelers would still be walking alongside wagons, punching oxen with sharp sticks.

Machine tools are the machines that make the machines that make the automobiles and the skyscrapers and the locomotives. Without machine tools the other machines could not be built. Man's

were soft pine. The shavings whirl from it red hot. In a few minutes it is fit to be rivetted home forever. How many men would be needed on that task? How long would it take?

### They've aided our prosperity

WE need not be mealy-mouthed about our industrial triumphs, nor should we be offensively boastful. Our prosperity is based very largely on these master tools.

Our cars and sewing machines and typewriters go all over the world. Money

other elements. But, without machine tools for the shaping, a ploughshare would be a strip of wood to which had been attached a nose of steel hardened in a blacksmith's forge. The clack of the wooden loom would be heard through opened doors in every village. Books would be printed a page at a time on crude presses from hand-cut type. Enough of this. The argument is being labored. We all know what tools do for us. Few know of the tools that make the tools.

Here is an illustration. There is in Milwaukee an establishment in which metal frames are made for automobiles. From start to finish no human hand touches them. Strips of metal are snatched from freight cars, rolled, bent, shaped, fashioned, riveted, painted, decanted by scores of intelligent machines. The mechanics have but to walk about looking on. If a breakdown occurs it is automatically signalled. While repairs are being made frames which have been completed to this point are automatically routed through the machines ahead. No delay has been occasioned.

Machine tools made the machines that do these miracles.

"Our aim," said Ernest F. DuBrul, general manager of the National Machine Tool Builders' Association, "is to transfer skill and intelligence from the man to the machine."

Two hundred and forty-five exhibitors displayed approximately 900 almost-human in operation machines in the Exposition Hall at Cleveland. In one arm of that hall a regiment could march. Another was large enough for a horse show.

### Made the Hall itself possible

FIVE million dollars worth of machine tools were shown there to 20,000 visitors at a cost of \$100,000 a day. That Exposition Hall could not have been built except for the machines built by the machine tools inside. A fleet of trucks, working with military discipline, hauled the machine tools to the hall. The trucks were products of the machines built by the machine tools.

Not even the trade names are known to many of us. What do we know of cemented tungsten carbide, which costs twice as much as gold and goes through hardened steel as though it were sirloin? What is a magnetic chuck or an universal hex turret lathe or a duplex hydro-matic miller?

We do not need to know. It is sufficient to realize that, but for the creations of the machine toolmakers, today would be a backward yesterday. Without them



COURTESY THE BOLLARD MACHINE TOOL CO.

The cry is speed, so the machine tool industry built these nine lathes to replace 38 slower ones and free 18 men for other jobs

puny arms cannot crush ingots of steel into working parts. Thirty thousand of a certain screw used in one American watch barely fill a woman's thimble. What human hand could fashion that screw? What human eye could see its threads?

A slab of hardened steel is seized by a magnet, bound automatically to a table, and planed smooth as though it

comes pouring home. The commonplaces of the American home are the luxuries of aristocracy elsewhere. They are within the reach of the ordinary American because tools put them there. He can pay for them because tools have fattened his weekly envelope and relatively decreased the cost of his living.

Other elements aided, of course. Insufficient credit has been offered these



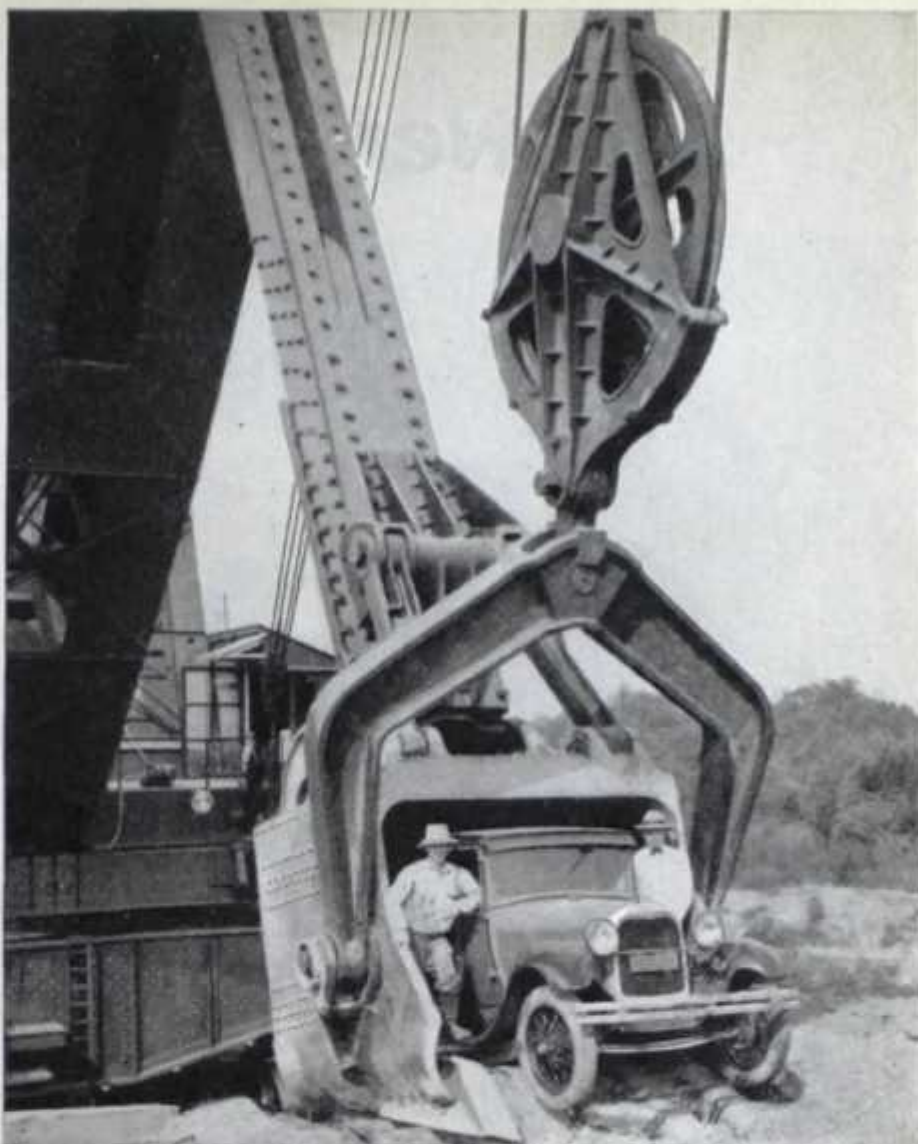
we would be rich and powerful as England was in Elizabeth's time. Our steel ships would be wooden caravels. Instead of 16-inch armor-piercing shells our battleships would pop little iron balls from muzzle-loaders touched off by matches.

The most striking single development of the age has been the automobile. It has created roads in backward lands, broadened intelligence, shifted populations, freed millions. In England and on the Continent cars are still being made by hand. Superb cars. Grand cars. Only the very rich can afford them. Buzzing on the highways of the world are millions of other cars in which the not necessarily rich are riding. Made by machines.

### How millions are saved

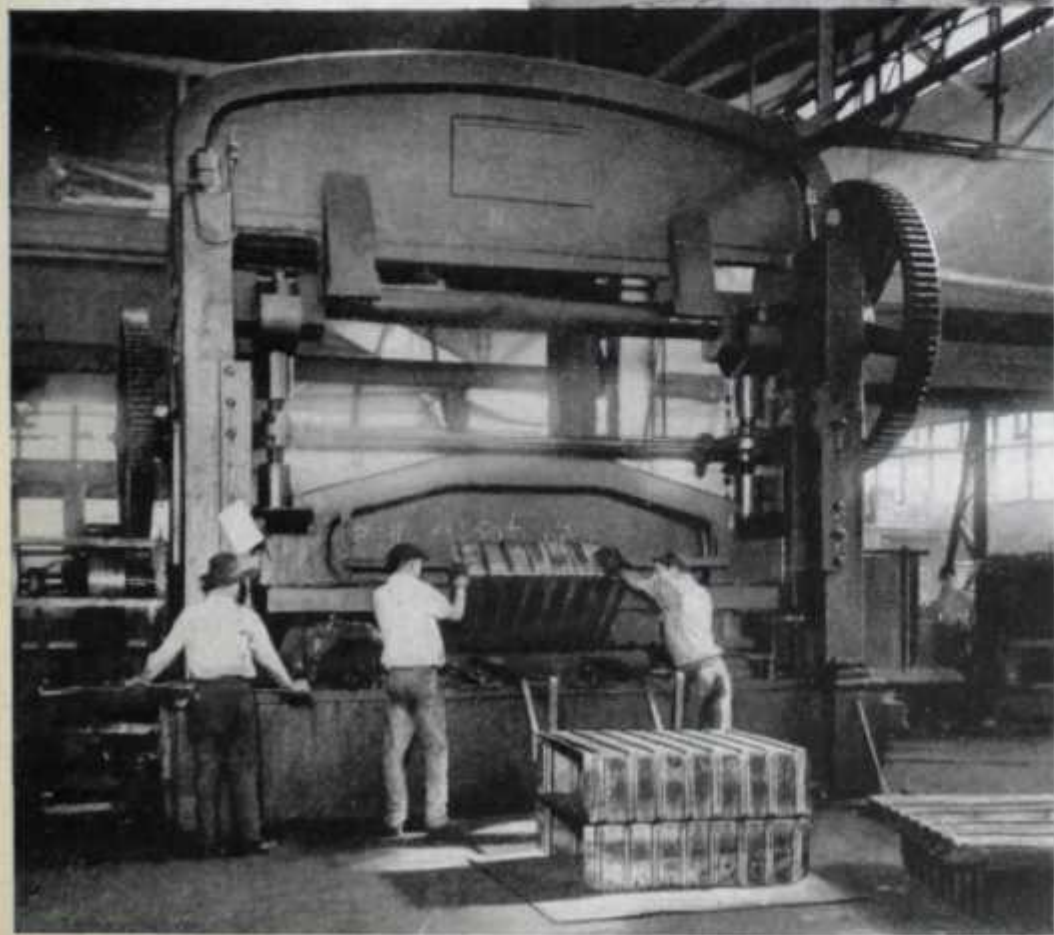
IT takes ten hours and two men to bore by hand the lubricating hole in a single connecting rod. A machine bores the same hole in six connecting rods at once at the cost of a dime. Ford has always made use of machines on the widest possible scale. Increasingly better machines have enabled him to cut his inventories from 60 to 30 days. More millions saved.

"There is no quantity operation that machines cannot do as well as men, or better."



COURTESY GENERAL ELECTRIC

The world's largest electric shovel, for use in an Illinois coal strip mine

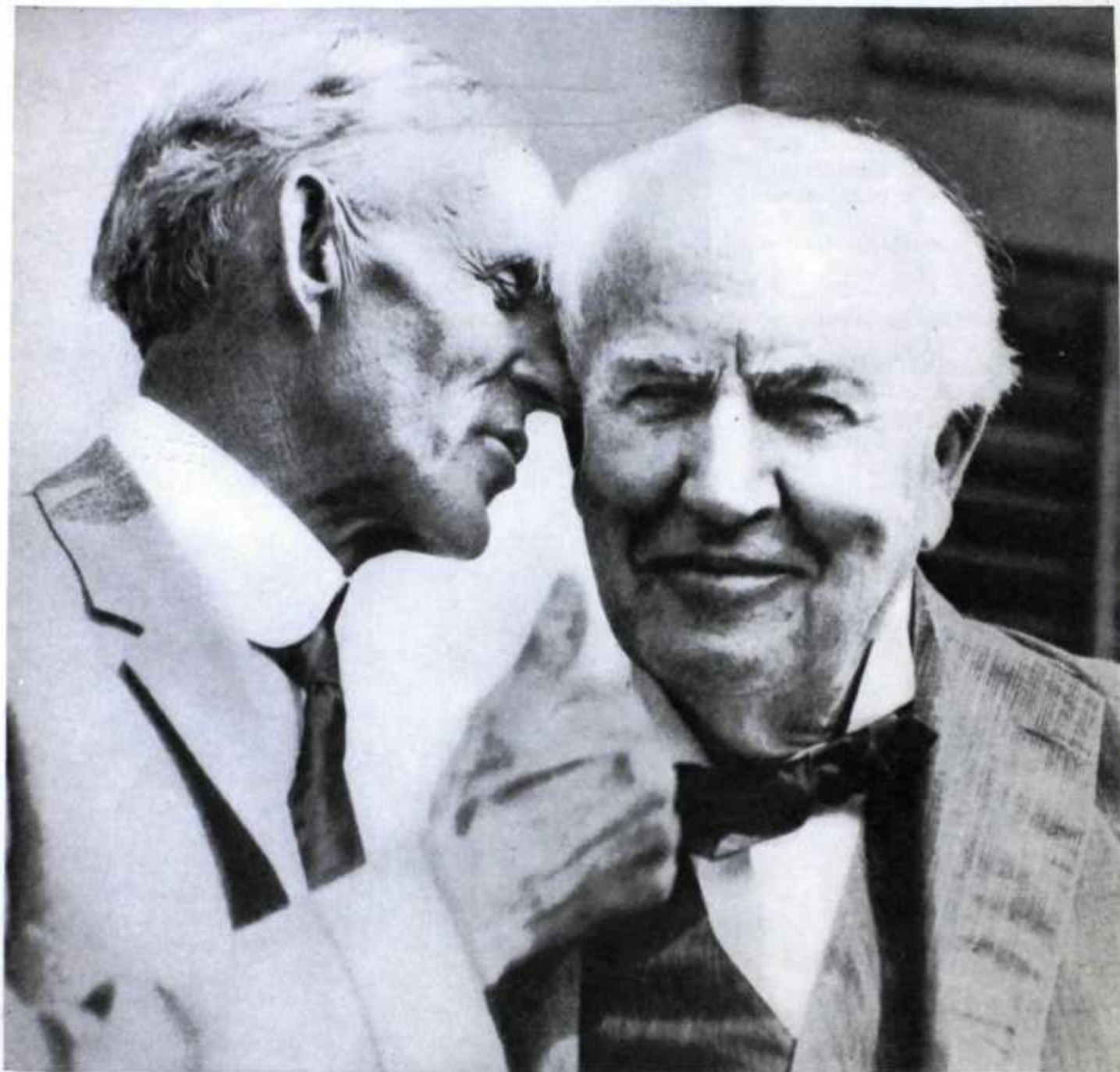


These giant jaws bend sheets of steel as you'd bend paper

Sumatra is used for cigar wrappers. Because they are extremely tender, the leaves are moistened before they are picked up. Now cigars are wrapped by machines. Once it took 20 minutes to grind a piston pin. Now the grinding is done in five seconds. A clown machine with two rocker arms seizes simultaneously two pistons for automobiles. One has been turned, inside and out, true to the measure of a gnat's heel. The other is on its way to the chuck. Time  
(Continued on page 176)



# Power! More Things for



Henry Ford and Thomas A. Edison, who made power visions possible of fulfillment

**A** VAST INTERWEAVING of power systems into virtually one unit; wealth and resources compounded in a manner beyond our present capacity to imagine—that is the logical future form of the electrical industry. Your task and mine is to aid in this expansion.

We dare not put up unnatural boundary walls and say, "Let the wires of one company end here and those of an-

other begin." We should not thrust sticks between the spokes to slow things up.

This may make it necessary for us to change some of our ideas as well as to broaden our conception if we are to direct the next few years of electrical development toward the best national results.

We do not need to fear the grouping together of service companies, because they cannot hold the advantage this

gives them unless they use it to provide still better and cheaper service to the public. Where public favor is dependent on service there can be no such thing as monopoly in the old, bad sense.

We hear much talk about the profits from power. My view of the matter is that legitimate profits are absolutely essential to the continuance of business initiative. But with reference to the power business I can go further and say that the profits accruing to the people



# More People By Henry Ford

through the use of power have always been greater than the profits gained by the electrical companies through the production of power.

The cry of profits—it is not always even a charge of excessive profits—has always been raised to befog the real issue. There is only one profit worth considering and that is the public profit. Nothing that any individual or any group can make out of an enterprise is comparable with what the

people always make out of it. The money goes back to those who know how to handle money, but the use-profit remains with the community.

## Opportunities for service

THIS overconcern about profits is the guy line that fear attaches to rapid progress. Once you get rid of fear, once you grasp the idea that the bigger a business is, the easier it is to run, you

comprehend that size only entails larger opportunities for and responsibilities of service.

Today we need electric service as never before and the need is growing daily. We cannot meet it unless the channels of service are enlarged in capacity and increased in number.

We are using more electrical energy than all the rest of the world combined. Electrical men tell us that nearly 70

*(Continued on page 190)*

## When Henry Ford Thinks Aloud

**I** SPENT a delightful day at Dearborn, Michigan, recently. It gave me an opportunity to see Henry Ford in his everyday working clothes. We talked of many things—of poverty and its ultimate abolition; of the possibility of mass production in Europe; of what an automobile will look like ten years from today; of the future of aviation. We talked of traffic problems; of men and machines and the criticism that machines may be the undoing of men.

I noted this—no matter what field we explored, the transportation genius, hard-headed visionary, with eyes on the stars and feet on the ground, came around again and again to find the answer in—Power.

Power! Power that will take the place, the time, the energy, of men. Power delivered through a wire from tumbling streams and vast beds of coal. Power that some day may be sent from generator to machine on waves of ether.

No man should be more interested in power than Henry Ford. He began his work-a-day life as a stationary engineer in a power plant, and perhaps, if he hadn't quit when his boss warned him against fiddling with fool gas engines, he might be a successful stationary engineer today with a steady job. Instead, he became one of

the world's greatest merchants of Power.

Just think of it! There are running around our roads and streets right now about 7,200,000 Fords, old and new. Model T had a horsepower of 22.5 and Model A of 24.3. Henry Ford has put at the disposal of the individual nearly 400 million horses.

"Your faith seems to be this," I said to him. "The well-being of humanity depends on man's ability to substitute artificial muscle, shortening hours of labor, giving him more leisure, more time for culture and contentment.

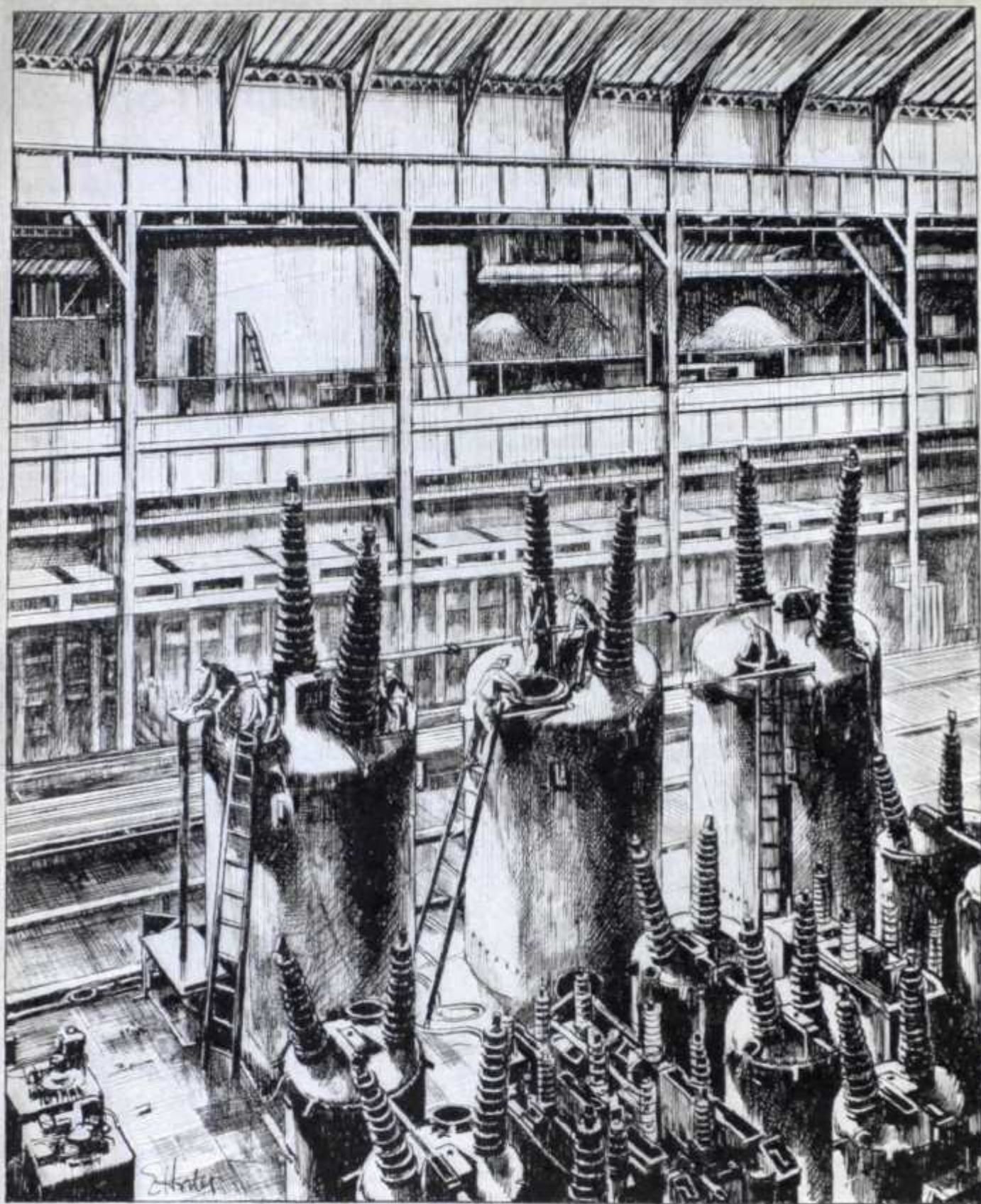
"Are we moving in that direction? Are we on the right track? Are we developing our resources of power, allotting it to the individual in the soundest way? You have heard, doubtless, the occasional criticism that our present system is becoming too big, that there is too much concentration in a few hands, and thereby a public menace.

"Further, it is charged that the leaders, managing the job of extending power lines and electric wires into every hamlet and home, are making too much money. Do you share this fear?"

Mr. Ford replied clearly and simply. I set down what he had to say, which he later approved. Here it is.

MERLE THORPE





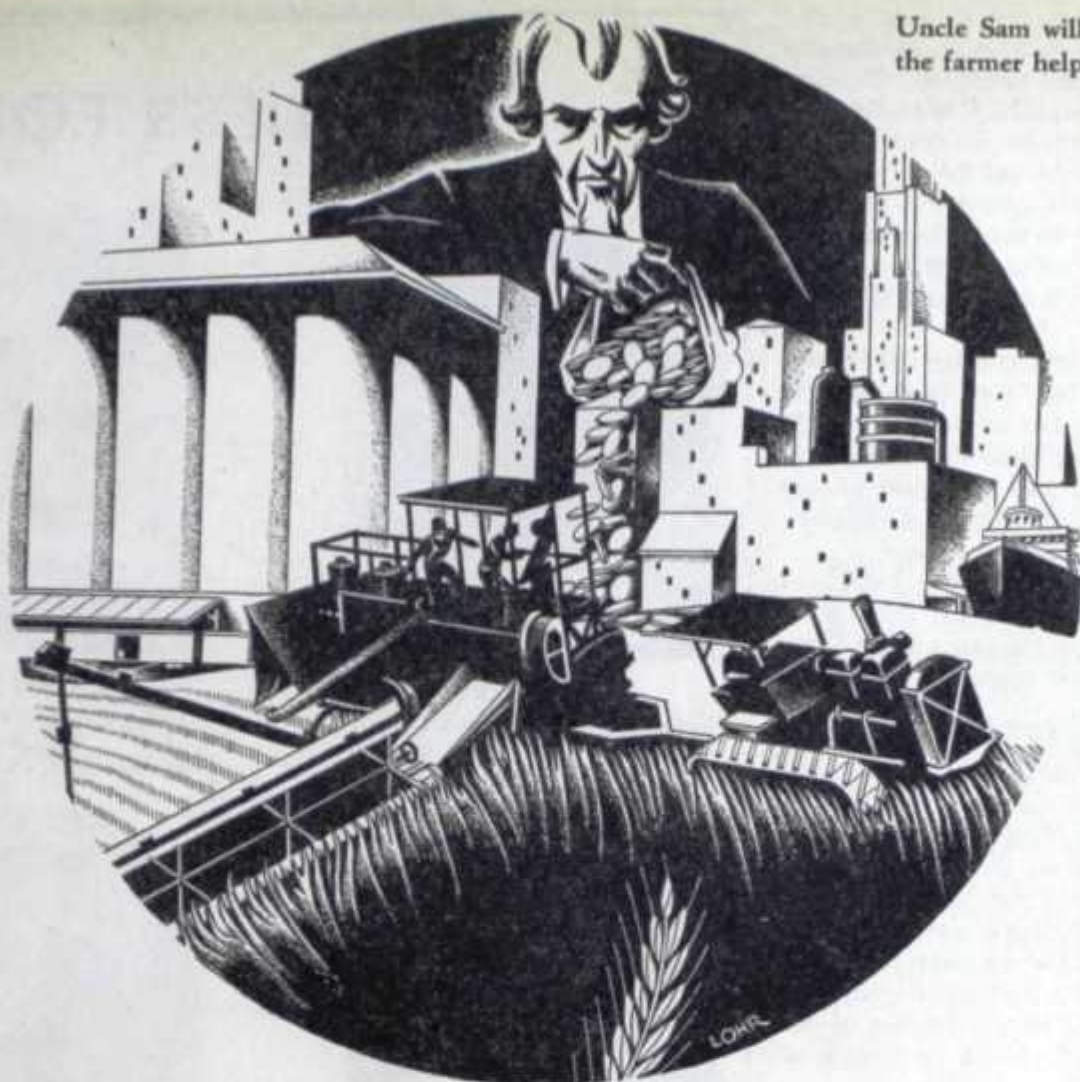
## A Cerberus That Guards the Generators—By Earl Horter

A HYDRA-HEADED monster this, but a strictly modern monster for all its resemblance to an ogre of mythology. The three huge steel tanks and their antennae-like terminals comprise the world's largest oil circuit breaker. The tanks hold 22,000 gallons of oil, and under normal conditions the breaker will conduct 300,000 horsepower of electrical energy.

The breaker, shown here at the Westinghouse plant in East Pittsburgh, Pa., is to be installed at the Roseland substation of the Public Service Electric and Gas Co. of New Jersey. Built to withstand great electrical surges caused by disturbances along transmission lines, it stands like a modern Cerberus, guarding turbines and generators against overloads



Uncle Sam will try to help  
the farmer help himself



# So That's How the Farm Bill Works

By ROBERT W. HORTON

DECORATION BY GEORGE LOHR

**W**HEN the Government created the Federal Farm Board "to promote the effective merchandising of agricultural commodities" it also created a 500 million dollar fund and a great deal of confusion. The 500 million dollars belonged to the Farm Board, but the confusion belonged to the public.

The purpose was plain enough. The Board was created to stabilize agriculture; the creating act directed that this stabilization was to follow certain lines; but the actual operation of the Board, the method by which it was expected to

accomplish its purpose and fulfill government expectations became at once obscured in a cloud of volubility and rumor as inaccurate explainers came forward to describe processes they did not understand.

The Government was going into the grain business, or, if you preferred, it was not; it was going to buy grain; it was going to lend money to individual farmers; it was whatever the volunteer informer happened to read into the bill. The business man, the taxpayer, and

- THE headlines have been replete with references to the Federal Farm Board during the last half year, but despite the columns that have been written on the subject few of us have had any very clear idea of just how the wheels go round in this half-billion dollar enterprise. Here is a clear concise sketch of the functioning of the Board

even the farmer soon clearly understood that he did not really understand anything.

The proposition is not really one to confound comprehension. It cannot be explained in a word, it is true, but it can be told in several simple words. The



Federal Farm Board was created by Congress under the Agricultural Marketing Act, signed by President Hoover June 15, 1929. It has eight members appointed by the President with the Senate's approval and the Act provides that "the major agricultural commodities produced in the United States be fairly represented on the Board." Each member of the Board is paid \$12,000 a year.

Thus brought into being, the Federal Farm Board had a purpose and 500 million dollars but no organization. It immediately set aside 150 million dollars for loans, and \$1,500,000 for expenses, including salaries of members and personnel, rent and travel.

If any of the 500 million dollars remains at the end of the fiscal year, June 30, 1930, it will revert to the Treasury and a new appropriation will be made for 1931.

The creating Act provides that, whenever possible, the Board shall use existing government facilities to carry on its work, thus avoiding duplication of expense. Acting on this provision, the Board took over the Division of Co-operative Marketing of the Department of Agriculture. For crop surveys, market conditions and a number of specialized services, it utilizes the services of the Bureau of Agricultural Economics of the Department of Agriculture.

### Organized by experts

IN SEVERAL cases, however, it had to go outside the government for experts. Its first need was for a legal department and to organize this department it employed, temporarily, George E. Farland, of Los Angeles, a recognized authority on cooperative law, at \$1,000 a month.

It also needed a finance department. Thomas Hildt, partner of Alex Brown and Sons, of Baltimore, contributed his services to organize a division to handle the Board's banking operations.

The creating Act does not state how long the Board shall function. Its term of existence depends largely on the effectiveness of its work.

The Board will attempt to help the farmer help himself.

The Act which created the Board says this shall be done by minimizing speculation, preventing inefficient and wasteful methods of distribution, encouraging organization of producers into effective cooperative marketing associations and controlling surpluses in any agricultural commodity.

Incidentally, this represents a new ap-

## BUSINESS FOLK IN



### SHE TALKS

Born to society, Marjorie Oelrichs now talks to the masses over the Columbia System about costumes



### FLYING PROJECT

Flying dirigibles to Asia is the plan of J. C. Hunsaker, Pacific Zeppelin Transport, a Goodyear unit



### YOUNG HEAD

Youthful George A. Sloan, lawyer, succeeds Walker D. Hines as president of the Cotton-Textile Institute



### HONORED

Michael Friedsam, B. Altman's president, is made honorary president of French retail society



### FOR DIRIGIBLES

Commercial helium from coal gas is perfected by Dr. H. P. Cady of the Kansas University faculty



### SHE BANKS

Helen M. Knight, San Francisco, conducts what is said to be the country's only all-woman bank





## THE MONTH'S NEWS



### HEADS B & M

Thomas N. Perkins is acting head of the Boston and Maine R. R., succeeding George Hannauer, deceased



### U. S. CHAMBER

Ralph Hudson, of Baltimore, is chairman of Domestic Distribution Department Advisory Committee



### MAKES BOOTHS

Edgar S. Bloom, is president of Western Electric, which takes over firm manufacturing phone booths



### SHIP CURB

Frank C. Munson, ship magnate, would have nations limit passenger ship building to eliminate waste



### ELECTED

The new president of the Mid-Continent Oil and Gas Association is C. C. Herndon, Tulsa Oil man



### SEEKS SALT

Widely known banker, Felix M. Warburg, is director of a company formed to get salt from Dead Sea

proach to the farm problem. Past efforts to improve agriculture's position have been directed chiefly toward better production methods. The results have been an increased food supply but inadequate marketing machinery. The Board will now attempt to establish this machinery. It will do it mainly by lending money, not to individual farmers but to co-operative marketing associations as defined in the Capper-Volstead Act of 1922, which authorized the association of producers of agricultural commodities.

### Helps farmer help himself

IT WILL not buy or sell farm products. It will not attempt to fix prices as it believes that prices are determined by certain basic economic conditions and cannot be raised arbitrarily without, in the end, damaging the market. It will, however, attempt to put the farmer in a position to ask a better price for his products by adapting for agriculture the trend toward organized effort already prevalent in other industries.

It is plain that if 1,000 farmers try to sell the same product in the same market to a limited number of buyers they are competing with each other. If the 1,000 farmers pool their product and market it through a single agency, there is then only one seller and a number of buyers. The seller's position is greatly strengthened.

That, roughly, is the end the Farm Board has in view, but it is a thing which, hastily done, might defeat its own purpose. It is natural for a man getting a higher price for his goods to produce more of those goods, thus offering a greater supply and forcing the price back down. The Act creating the Farm Board recognizes this danger and specifically provides against it.

"No loan," says the Act, "shall be made by the Board, if, in its judgment, that loan is likely to increase unduly the production of any agricultural commodity of which there is commonly produced a surplus in excess of the annual marketing requirements."

Because of this and other dangers, the Board has necessarily moved slowly and with caution.

Its loans are principally of two kinds—loans on facilities and loans on commodities. The facility loan is granted to enable a cooperative to construct or acquire, by purchase or lease, physical marketing facilities necessary for handling, storing, processing or merchandising agricultural commodities.

The demand for these loans has been so great that, if all were advanced, the

(Continued on page 162)







Carthaginians in the Mediterranean—Dawn of the Christian Era



The English in China—The Seventeenth Century

**T**HE growing consciousness of art on the part of American business has been amply demonstrated in recent years through the erection of cathedral-like skyscrapers, the tendency toward more tastefully decorated offices, the skillful introduction of color and design into commodities of everyday use, and in a host of other ways. Now comes another significant step, the introduction of the highest form of modern murals, coupled with a bold departure in interior decoration, into the realm of the department store.

Pictured above are four of the ten canvases, all of heroic

## Commerce Finds

size, that will adorn the walls of the store that has struck this new note, the new Kaufmann Department Store, Pittsburgh. By Boardman Robinson, the American muralist, the nine completed paintings were exhibited at the Art Students League Gallery, New York City, early in December, prior to being placed in their permanent home. The paintings will





The Dutch in the Baltic—The Sixteenth Century



Trade and Commerce in the United States—The Twentieth Century

## a Place in Art

supply the only color, other than that lent by counter merchandise, to the first floor of the new store. Frames for the murals, the elevator shafts, and all ornamental work in the ground-floor interior will be of bronzed metal, while the supporting columns will be of black marble and black glass.

Mr. Robinson in ten paintings attempts to symbolize, in

terms of design, color and three-dimensional form, the various epochs in the pageant of commerce. The composition forms a patterned panorama of the growth of commerce. The six subjects not pictured here are "The Arabs and the Persians—Before the Christian Era," "The Venetians in the Levant—End of the Middle Ages," "The Portuguese in India—The Fifteenth Century," "Slave Traders in America—The Eighteenth Century," "The Clipper Ship Era—First Half of the Nineteenth Century," and "Commerce on the Mid-Western Rivers—Middle of the Nineteenth Century."



# Science



This picture of David Sarnoff was taken by Robert H. Davis, widely known writer, who snaps his friends as a hobby

**I**T IS natural and inevitable that when the world meets Little Business it should pat it on the head, chuck it under the chin and exclaim, "My, how the boy's growing!" It is the protective instinct of society toward youthful promise. It is proper that when Business dons its first long trousers it should be encouraged to go out and cut a swath in industrial life. It is the demand of industrial progress.

But what is not so generally understandable, perhaps, is society's relation to large-scale industry which is only now in the making. Let a pioneering business organization, through the soundness of its constitution, the watchful care of its parents or the ministrations of its nurses, develop into a large-scale industry, and there are legislative doctors that would restrict its growth and its scene of action.

## They fear an industry grown up

THERE are fearful souls who would see in it a menace to our future prosperity. There are those who would turn it back, if they could, toward industrial infancy. The industry acclaimed in its childhood, encouraged in its youth, often finds the scowl of legislative suspicion leveled upon it in manhood. There are imaginations which mere size tends to frighten.

Perhaps we as business men are not without blame for some popular misconceptions that still float about Big Busi-

ness. Perhaps we have gone too far with hard and fast definitions. Too much dogma has crept into the catechism of business. Too rigid boundaries have been established for interindustrial relationships.

Is it possible that the enormous headway made by modern industry has far outdistanced the theorists who follow with label and paste pot each new business development?

With great consolidations under way, with other mergers in prospect, and the era of large-scale business upon us, it is

clear that the time has come to orient ourselves to new economic and industrial conditions. The new and profound forces that have entered modern industrial organization have



There were those who exhausted themselves and their competitors in the holy name of competition



# Will Destroy the Laggard

★ A new supplantive competition has arisen to force  
Business to give service or die

By DAVID SARNOFF

Executive Vice President, Radio Corporation of America

ILLUSTRATIONS BY LEWIS DANIEL

tended to bewilder popular and legislative thought.

In some minds, every great industrial consolidation immediately raises the specter of tentacled monopoly. Every merger of industrial units is followed by loud lamentations over the death of competition.

Is it true that the growing tendency toward combination, association, and merging of industrial and other business interests threatens to place our business structure in the grip of monopoly? Is it possible that the juggernaut of our vast business machinery is crushing the salutary and progressive influences built up by competition? Modern industry can afford fairly and squarely to meet these issues.

There is no gainsaying the conclusion that monopoly which exploits rather than serves public needs is a destructive force, and that the death of constructive competition leads to industrial decadence. Self-complacent monopoly carries within it the seeds of industrial disintegration; the industry that cannot grow cannot live. Nor can any business prosper which has lost the stimulus or spur of wholesome competition.

Certainly the test of fact amply denies the fear that modern large-scale industry may bring unfavorable influences in our economic life. The increase in wealth, in power, in family and in individual well-being in the United States, has been coincident with the growth of large-scale industry. The consolidation movement apparent during the past 20 years has resulted in striking improvements in productive efficiency, in vast stimulation of technical progress, and in greater development and application of technical research.



From the cauldrons of science new forces of competition are constantly arising; a pioneering technical development may shake an investment of millions of dollars

Large-scale industry has brought the automobile, formerly the luxury of the rich man, to the average American wage earner. The mere turn of a switch floods his home with electric light. The lifting of a telephone receiver places him on a chain of communication that covers the country. Modern industry with its vast production and distribution capacity has lightened the economic problem for every man and woman in the United States.

## Competition had no rules of war

CONTRAST this to the days when competition meant bare knuckles, and often a blow below the belt; when industry was weak, when organization was ineffective, when business was an adventure from which the vast majority of enterprises never returned, and what are the facts? The efforts of a lifetime often left the wage earner in poverty. These were the good old days of unrestrained individual competition, and

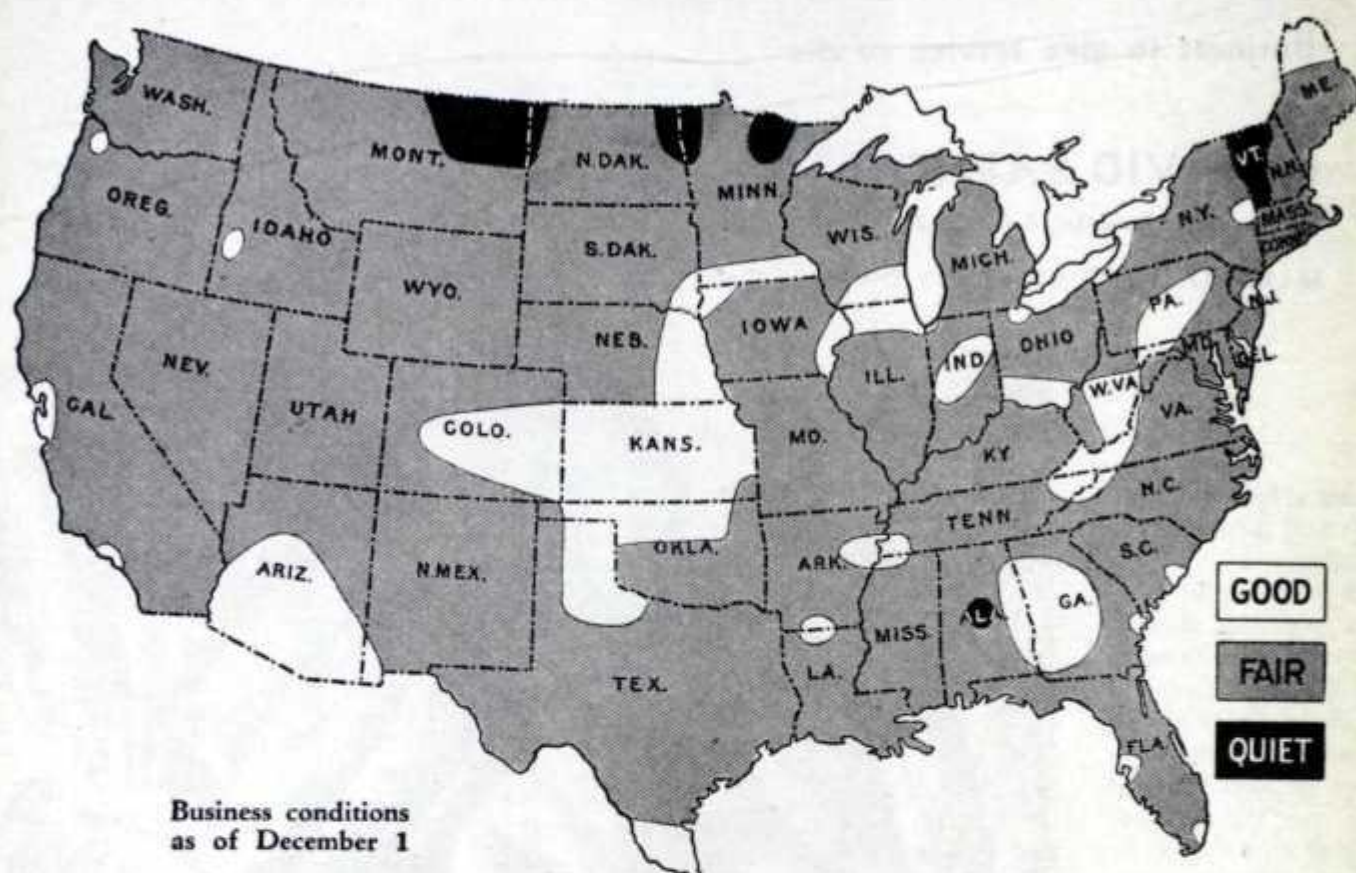
(Continued on page 72)



# The Map of the Nation's Business

By FRANK GREENE

Managing Editor, Bradstreet's



## A BRIGHT DAWN FOR 1930

**N**OVEMBER, 1929, will probably be remembered in the years to come for three important happenings: the culmination of the 1929 decline in the stock market; the launching of possibly the greatest experiment in psychology that the country, for that matter the world, has ever seen and last, but not least, for a change from almost summer heat to winter cold, which set in motion a large volume of consumer demand for hitherto neglected seasonable goods, whether wearing apparel, fuel or other products.

The three happenings, occurring on separate days and, in the case of the weather, certainly without previous arrangement, set in motion

THE business map of this month offers further proof—if that is now needed—of the fundamental soundness of business.

Spotty conditions east of the Mississippi River last month have almost entirely cleared up and business in that territory closes the year fair to good. West of the Mississippi a similarly optimistic record is revealed.

A glance at the map of a year ago in comparison with this month's map shows that, taken as a whole, there is little cause for complaint throughout the country and much cause for satisfaction as the new year dawns

remedial forces which, operating in different ways, combined to restore sanity to the stock, grain and cotton markets; to rally the forces of trade and industry and to set at rest the idea, common in earlier days, that a clash in the stock market of and by itself means a breakdown of business.

Credit for the remedial efforts which set in motion the first important action, the careful control and final guidance to relative safety of the hysterical mob action in the stock market, must be given to the New York bankers and the Federal Reserve authorities who stayed the stampede of sellers and by a series of moves brought about an appearance of orderly marketing of millions of



shares of stocks. The tide of prices was apparently ready to turn when, on November 14, Secretary Mellon announced his plan for reducing income taxes, the Stock Exchange issued a questionnaire on short selling, the New York Federal Reserve Bank reduced its rate from five to four-and-one-half per cent and a number of corporations declared extra dividends on their capital stocks.

Friday, November 15, saw President Hoover's call for action in mobilizing the industries of the country for the purpose of providing work, coordinating forward movements of business, encouraging export trade and benefiting agriculture.

In the succeeding week the representatives of capital, labor, industry and trade met and announced their plans for next year, this work of effort finally crystallizing in the request made by President Hoover that further steps towards steadying business be taken charge of by the president and chairman of the Chamber of Commerce of the United States, which, in accordance therewith, summoned a meeting of business leaders on December 5 at Washington. So much for the man-made efforts at restoring the balance lost in the Great October-November stock market debacle of 1929.

Without any pretence of coordinating its activities with those of others, Nature, in mid-November, took charge of the weather and a record-breaking spell of unseasonable warmth was replaced by below-normal temperatures, accompanied by snow. This spurred lagging retail trade as nothing else could have done. It put a new face on the buying of seasonable goods, increased buying and mining of coal, awakened interest in holiday goods and, if it did not check the reactionary trends in a number of industries, at least demonstrated that there was a good reserve of buying power.

### New work ahead

IT WOULD be idle to claim that there have not been any important recessions in trade or industry; the country, and the business and industrial communities particularly, know better. But the action taken in big lines towards affording work and calling for

great quantities of supplies of all kinds to be used in new construction, whether of railroads, highways, public utilities or other activities, will carry on many productive enterprises. Some of the goods needed are already being produced, witness the 1,500,000 tons of steel rails ordered for next year and being turned out by steel mills, the advances in wages given many thousands of men by Henry Ford, and the work afforded many other thousands in getting ready for the spring campaigns.

### Capital will be available

OF GREAT, perhaps primary importance in the furthering of plans for new work is the new face put upon the matter of raising the needed capital of billions of dollars. The release of billions of money locked up in stock market loans and the cutting of money rates in the past two months, this in some cases amounting to a halving of time loans, is a sign that capital will be available when, as and if needed for new construction.

There is nothing new in the returns from the iron, steel, automobile and

building industries to the effect that operations have slowed down in all of these lines from the peak activities of last spring or summer. There was a sharp drop, 3.9 per cent, in pig iron in November from a year ago but the peak of this activity as of steel output, which fell 2.9 per cent in October from last year was, it must be recalled, back in May. Automobile production dropped 4.3 per cent in October from a year ago while the peak of production was in April last. Unless signs fail, December auto output will exceed that of November. Building permits fell 14.8 per cent in October, but these have been sagging for several years past, so far as actual construction of houses, offices and stores is concerned. Cement, brick and lumber production receded in the fall months but cement prices turned upward in November as new expenditures for highways were called for.

### Fewer failures in November

FAILURES and liabilities alike decreased in November and the former are below recent years for the eleven-months period.

Rubber consumption fell 14.8 per cent from a year ago, while silk and cotton consumption exceeded a year ago in October by 15.1 per cent and 3.9 per cent respectively.

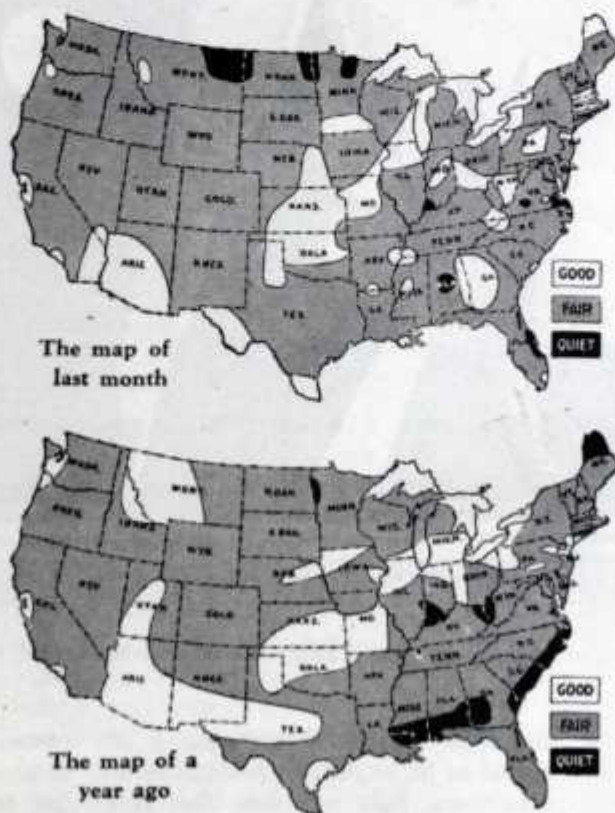
Silk consumption reached a peak in August and cotton consumption as far back as January last with another rise in May.

Production of electricity reached a new high peak in October, when it increased 9.6 per cent over that of a year ago. Bituminous coal output in October exceeded the output of a year ago by a fraction of one per cent, coke production gained 9.5 per cent and cigaret output gained 12.9 per cent similarly.

This list might be strung out further, but one point is that, while signs of ebbing in activity have been noted for longer or shorter periods in most lines, the year as a whole will show gains in nearly all lines except building and building materials.

Foreign trade still shows the largest totals since 1920 with imports gaining 9.5 per cent and exports 6.5 per cent over those of a year ago. Bank

(Continued on page 173)



Many industries have expressed their confidence by speeding up their activities, affording more work and calling for great quantities of supplies



# What Will Radio Do for



The main field of radio is in transoceanic and transcontinental work, over vast distances



TO ONE who has been privileged to see his inventions develop from crude experiments to world-wide institutions and industries far beyond the wildest flights of fancy, the rôle of prophet presents problems in unrestrained imagination rather than in conservative deduction. So, in attempting to look

ahead in radio developments, I am moved to be as rash as possible in my predictions, fully confident that, in so doing, I shall make a better guess than would a more timid prophet. Hence let us engage in rash discussion of the future of radio.

To the average man, even a review of today's radio achievements may read like a fairy tale. We are too near the

mountain to behold its magnitude. Few of us realize the proportions attained by our broadcasting institutions and the resultant radio industry. We now have about 600 broadcasting stations in the United States alone, catering to some 35 million listeners-in.

Daily, the short-wave broadcasts from this country reach out to Europe, South Africa, Australia, and the Far



# Us in the Years to Come?

By Lee DeForest

Vice President, DeForest Radio Telephone & Telegraph Co.

Fellow of the Institute of Radio Engineers

DECORATIONS BY GEORGE ILLIAN

★ **"WHAT will they be doing next?" you've asked time after time when conversation has turned to our modern wonders. Here a man who has been called "the father of radio" attempts an answer so far as concerns radio. His prophecies are rash, he says—but they will fall short of future actualities**

East, in many instances being rebroadcast so that millions of far-flung peoples can become acquainted at first hand with American songs, entertainment, education, institutions, public men, and general culture.

Short-wave signals from various countries are reaching our shores and, in some instances, being rebroadcast. We are on the verge of international broadcasting when the entire world shall become a single audience taking part in a universal forum of enlightenment. No greater contribution has ever been made to world peace.

## Radio growing more valuable

THEN there are the transoceanic radio communications, quite overlooked by the average man, although much of his daily news, business, finances and international relations may hinge on it.

A short-wave radio transmitter, not much larger than the usual steel filing cabinet, maintains constant, positive, high-speed radio communication with a receiving station 5000 miles away. Radiograms are hurled through space at 200 words a minute and more.

Ships at sea are always in touch with one another and with land. The largest ocean greyhound handles 2000 radiograms on a round trip, quite aside from weather reports, ship's business, press, and so on.

The airplane, flying through the night, even in dense fog, is guided by

radio beacons with as much precision as the motorist following the cement highway by the glare of his headlights. Two-way conversation is afforded the airman while in the clouds, with the landing fields and even with any telephone subscriber if desired.

Photographs, handwriting, documents, printed matter, fashion sketches are flashed across thousands of miles of land and sea. Important business deals are consummated by radio signatures. Lindbergh lands at Le Bourget, and a few hours later his fellow Americans have the picture before them in their newspapers. Still more dramatic, living pictures are being flashed through space and, combined with the living voice of broadcasting, we are making the final onslaught on the barrier of time and space.

All these achievements and many more are based on a simple device—the audion vacuum tube—an elec-

tric lamp somewhat elaborated upon by the addition of a tiny plate or cylinder, and a bit of coiled wire or grid.

Only two decades ago, I sought the cooperation of lamp manufacturers in making up a few of these elaborated lamps, so that I might give my wireless detector idea a practical trial. But the lamp manufacturers were too busy to bother with such fanciful ideas. Today, lamp manufacturers and others are trying to produce audions or vacuum tubes to meet the exacting demands of millions of home radio sets.

In 1909, I essayed the first radio broadcast from the Metropolitan Opera House, with only a handful of radio operators and amateurs for my audience. Today, millions of listeners are insisting not only upon the finest opera but also no end of varied entertainment and enlightenment. Twenty years ago



**Ships at sea and night-flying airplanes are reached alike through the long arm of radio.**



our annual radio trade was perhaps a million and a half. Today, I am told, the annual radio trade approximates 600 million dollars.

All these things have taken place in two decades! With the present research and engineering facilities at our disposal, I look forward to still greater pace in moulding the future of radio's art and industry.

Even so, there are some things I do not hope for. So, rather than be accused of too great optimism I begin my prophecy with a word about radio transmission of power.

Let us note that the transmission of power is a matter of economics. A transmission system is practical only when measured by the yardstick of dollars and cents. Thus with cheaply produced power, we can better afford transmission losses than with costly power such as we are generating today in our coal-fired power plants. Nevertheless, a transmission system that starts out with thousands of watts and ends with thousandths of a watt is hardly economical. That, precisely, is radio power transmission as we now know it.

### What of power transmission?

ALTHOUGH we have explored the radio spectrum up and down the wave lengths, we have had no assurance of economical radio power transmission. Still, who knows? Nikola Tesla, the brilliant electrical worker who has given us our modern alternating current transmission and power system has predicted radio power transmission. Others have made such predictions. Nothing is impossible, if the will to conquer is present.

Television, or seeing at a distance whether by wire or by radio, is something quite different. Although the present attempts are relatively crude, comprising simple pictures with a modest degree of detail, we have ample assurances of better technique and refined methods soon.

My good friend, C. Francis Jenkins, of Washington, D. C., inventor of the motion-picture projector that took movies out of the peep-hole, penny-in-the-slot stage and placed them in the theater, has already made notable progress in television. With the modest power of his experimental transmitter W3XX at Washington, he entertains

some 25,000 lookers-in who are compelled to build their own experimental receivers awaiting the advent of commercial models.

This is so familiar to me—so much like the pioneer days of broadcasting—that I am sure television must develop—first through the experimental days, with home-made equipment; then the gradual crystallizing of a practical system, based on knowledge gained in actual work, followed by the mobilization of the essential capital, personnel and production facilities for the creation of an industry.

Well, what shall we do with television—the infant of the radio industry? The answer depends largely on how good television technique will be in the future.

At present we are limited to simple pictures whose main appeal is the thrill of receiving them hundreds and even thousands of miles through space.

In fact, instead of attempting crude half-tone pictures within the limited wave length bands, Mr. Jenkins, to my mind, has been quite correct in giving programs of simple shadowgraphs or black-and-white pictures.

With the passage of time we must eventually evolve a television system that will have ample detail. Whether this will be achieved through remarkable elaboration of our present methods, or through an entirely new principle, I do not profess to know but sight broadcasting, like sound broadcasting, must eventually achieve utmost realism.

When television does achieve the necessary realism it will find many applications. I look forward to the unfold-

ing of world events on the home television screen, just as they are happening and not several days or weeks later. I expect the living image of the public man to join his voice in the future home radio set. I contemplate players within sight and hearing of the home audience.

### Television for sport events

NEVERTHELESS, I cannot conceive of television eliminating the motion picture. The two serve totally different ends. Television, please note, will be the spontaneous presentation—flashed before the audience for immediate enjoyment—born and dead in a fraction of a second. The motion picture, on the other hand, is recorded permanently and made available to any audience at any time and any place. As the phonograph industry has joined hands with the radio industry to form a remarkable partnership materially benefiting both parties, so must television and the motion picture join hands in the future.

Television, of course, will have an enormous field in the presentation of actual happenings. I believe it will attain its climax in the presentation of sporting events in many theaters, auditoriums, and fair grounds. The event will be picked up at the scene, and flashed over wire net works, for the wire lines will always present the simplest and best method of supplying maximum detail with the most elaborate equipment.

Even today, in its infancy, television leans heavily toward wire transmission because of the abundance of channels available as contrasted with the limited channels on the air. Radio, on the other hand, will always be employed for the true broadcasting of television programs to the unlimited audience in the homes.

Turning to sound broadcasting, with its remarkable achievements of today, it seems hardly possible to envisage further progress; yet I am certain we have merely gotten started. I believe we have perhaps found the lasting basic principles of broadcasting. The audion or vacuum tube must always be the foundation, for I cannot conceive of any other method of detecting and amplifying delicate radio and audio energy.

I can foresee, however, many vacuum tubes of entirely new design. The recent introduction of the marvelous screen-grid tube, with many times the amplification of the usual three-element tube is introducing us to a new era in broadcasting possibilities. There are untold opportunities in vacuum tube development not only by way of new tube de-

(Continued on page 152)

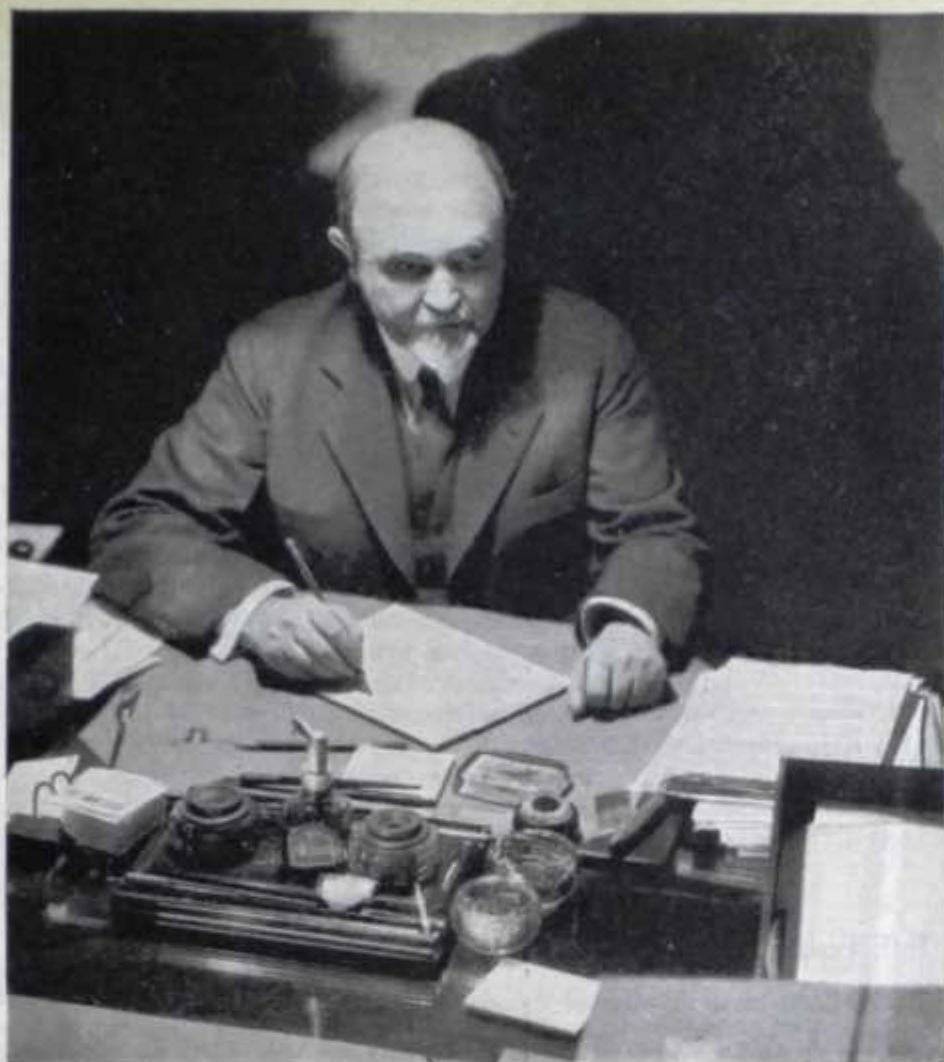


World events will be witnessed in our homes



Lindbergh lands in France, and in a few hours we see the pictures





UNDERWOOD AND UNDERWOOD

For two years, Commissioner Humphrey worked for the inauguration of a campaign against fraudulent advertising. He persisted until he won the support of the Commission and of leading newspapers and magazines

# We Quit Playing Tag With Fraud

By W. E. HUMPHREY

Federal Trade Commissioner

**I**N JULY, 1926, the Federal Trade Commission brought an unprecedented and, in the opinion of many, an incredible action. In an attempt to check the flood of fraudulent advertising, which according to a conservative estimate was robbing the public of more than 500 million dollars a year, the Commission issued a formal complaint which charged both an advertiser and the publisher of a magazine that carried his advertising with acts and practices that were to the prejudice of the public and the competitors of the advertiser. The complaint also charged that the acts constituted unfair methods of competition in commerce.

- **FRAUDULENT** advertising was costing the country 500 million dollars a year and the advertisers laughed at government restriction. When restraining orders were issued, they changed the name of their product, moved their offices and continued business. Then the Federal Trade Commission brought an unprecedented action—

Because of this complaint, some newspapers and a part of the trade press criticized the Commission rather severely. Several prominent legal authorities expressed the belief that we could not legally hold a publisher responsible for the fraudulent acts of his advertisers.

The general criticism increased when the Commission, some weeks later, in a similar case, cited not only the advertiser and the publisher, but also the advertising agency involved.

One of the leading advertising journals promptly denounced the Commis-



sion for attempting to set up a national censorship of advertising. Editorially and otherwise, this magazine condemned the procedure, questioned its legality, forecast complete failure, expressed fear of the outcome, and prophesied that the federal courts would soon be congested with the cases of publishers and advertising agencies whose rights had been invaded.

### Cooperation assures success

**FORTUNATELY** this prophecy proved completely false. The campaign led to a trade practice conference at which practically all the leading publishers approved the Commission's action and pledged their support. The conference also voted unanimously in favor of cooperation between the National Better Business Bureau and the Commission in suppressing fraudulent advertising. The success of the proposition is largely due to this excellent cooperation.

The rapid increase in the number of advertising cases has made necessary the organization of the special board of investigation, on which sit three members of the Commission's legal staff. This special board has been sitting since May 6.

In its first four months, it held approximately 60 hearings, attended by nearly three times that number of publishers, advertising agency representatives and advertisers. The results have been exceedingly gratifying, and not a single recommendation of the board has been rejected.

Undoubtedly, most of the opposition and criticism arose from misunderstanding of the Commission's purpose and from ignorance of the widespread circulation of fraudulent advertising. Even publishers and advertising men had little idea of the extent of the fraudulent practices. About three years ago, when I stated that fraudulent advertising schemes were costing the public 500 million dollars annually, many members of the publishing and advertising industries ridiculed the statement; but subsequent evidence proves the estimate conservative.

Some of those who have attempted to

obstruct the Commission's effort have claimed that practically all the advertisements under suspicion are unimportant and are published in obscure papers and magazines.

Although this claim was only partially true, a large volume of the advertisements in such publications are fraudulent and many of the publications are widely circulated principally in small towns and country districts.

In a single issue of a certain magazine the Commission found more than 160 advertisements that were unquestionably fraudulent. In another magazine which claims to be high class we found more than 50 such advertisements. These illustrations are by no means exceptional, and when one considers that there are several hundred publications of the kind, and that it is not unusual to find occasional fraudulent advertisements in metropolitan newspapers and expensive magazines, the extent of the frauds is more readily comprehensible.

The loss to the public from fraudulent

**THE Federal Trade Commission has found that all but a small number of concerns mean to be fair and honest in their advertising. This small number, however, has been systematically mulcting the public and undermining faith in legitimate advertising.**

**Now, however, with the cooperation of advertising agencies and publishers, the Commission expects to stop 90 per cent of the fraudulent copy within a year and it is prepared to follow its present course until this great system of robbing the public is ended. It believes \$50,000,000 was saved in the space of six months**

advertising has also been indicated by interesting evidence. In one of the minor cases, our investigators found that although the advertiser occupied one small room and employed but one assistant he was doing a business of nearly \$60,000 a year with a fake physical development scheme.

Another case revealed that a small advertiser was doing about \$325,000 worth of business a year on a hair treatment. An antifat advertiser, against whom the Commission has issued a

cease and desist order, was found to be doing a business of approximately \$600,000 annually.

If we consider a number of these cases, strike an average of the volumes of business reported, and then multiply the result by the number of advertisers who are shown by their advertising to be operating fraudulently, we arrive at a total far exceeding my early estimate. There is no justifiable doubt that this fraudulent business, made possible by the publication of false and misleading advertising, has not only caused an appreciable loss to the public, principally among a class that cannot afford to spend any part of its income unproductively, but has also tended to undermine that public confidence on which all legitimate advertising depends for its success.

If these facts had been generally understood, I am sure there would have been no adverse criticism of the Commission's effort. Our experience had shown that it was impossible to combat these frauds successfully as long as the columns of widely circulated publications were left open to fraudulent advertisers.

The old procedure, based on the supposition that the publisher and the advertising agency were not responsible for the nature of the advertising they handled, allowed the individual advertiser to do just about as he wanted. In many cases, when the Commission's investigations of fraudulently advertised propositions justified prosecution, we issued formal complaints which gave the respondents the privilege of attending hearings to show cause why cease and desist orders should not be issued against them. In the majority of such cases the results were disappointing.


### Old method allowed evasions.

**THERE** was nothing to prevent the fraudulent advertiser from complying with the prohibitions of a cease and desist order, moving to another office, changing his firm name and sometimes the name of his product, and going on with his scheme.

When this occurred, as it frequently did, the Commission had to start all over again with another investigation and a new case. The procedure is thorough and it requires time and costs a good deal. After following up the same individual in a number of cases, the Commission finally concluded that the old procedure was too cumbersome and expensive, and that we should have to evolve a more direct method if we

(Continued on page 120)





● EVERY business man is interested in building up an estate to protect his children's future. How many of us, though, have stopped to think that happiness depends as much on having a proper place to live as on a personal fortune?

# How and Where will Our Children Live?

By FREDERIC A. DELANO

President, of the American Civic Association,  
Formerly President, Wabash Railway Co.

**I**N the year 2,000 the United States will have about 187 million population. Will our land area meet the demands of this population and how are we to determine the best use of our land resources?

The Committee on Bases of Sound Land Policy has just completed its answers to these questions. The Committee was called together something more than two years ago by the Federated Societies on Planning and Parks. Its membership included representatives of the American Civic Association, the American Institute of Park Executives, the American Park Society, the National Conference on City Planning, the National Conference on State Parks, the Chamber of Commerce of the United States, the American Forestry Association, National Conference on Outdoor Recreation, National Parks Association, Institute for Research in Land Economics and Public Utilities and certain interested federal agencies.

On the Committee served agriculturists, foresters, scientists, economists, engineers, city planners and park administrators. They studied the

Density of population in urban areas may make it necessary to set up restrictive standards





**In another century a stabilized population may make it necessary for industries to curtail production**

results of researches carried on by specialized groups but never before brought together to show their inter-relationship.

The information thus collected should assist industry and Government in planning for the future. Certainly no intelligent national or business planning can be done without some knowledge of the kind of persons for whom we are making these plans. Looking backward about 70 years to the period before the Civil War, we may realize the vast changes in population, living conditions and scientific services that have taken place in these two generations.

It is not unreasonable to suppose that the next 70 years will bring changes just as marked, although the character of these changes may differ greatly from the evolution of the recent past.

What are the facts about our future population? In 138 years, a little less than twice the time which will elapse before the year 2,000, our population has increased from slightly less than four million to some 115 million. At present we are gaining about 1,500,000 annually, but that rate of increase is slowing up.

### A decreasing increase

FROM 1790 to 1860 we advanced at a fairly uniform rate of 35 per cent every ten years. From 1860 to 1870 the rate was 35.6 per cent. But from 1910 to 1920 it was only 14.9 per cent. The estimated increase for the census period from 1920 to 1930 is 10.9 per cent.

A study of births and deaths, which must be made from very incomplete records, would seem to show that the birth-rate in cities (which now comprise more

than half of our population) fell from 30 per thousand to a trifle more than 20 in the past 15 years. France maintains practically a stationary population with a birth rate of more than 19. With the death rate which existed in the United States in 1910, it would be necessary to have a birth rate of 19.42 to maintain a stationary population.

The upshot of the population discussion comes to this. The population of the continental United States is expected to reach 150,000,000 by 1950 and perhaps 187,000,000 by the year 2,000. On the basis of these estimates, a stationary population will not be reached until some time in the next century, perhaps at 225,000,000.

The people of the year 2,000 certainly will not be living on farms in the sense in which we now use the term "farm." There is every indication that the farm acreage under cultivation in 1919, with even a smaller per capita farm population, could easily produce agricultural products to support the entire predicted population of the year 2,000.

We may assume, then, that the 70 million or 75 million additional people will live in urban regions, not necessarily in the crowded metropolitan centers which we know today as cities, but in suburbs and towns. These people will be

working at some occupation other than cultivation of the soil.

For at least another century, agriculture, commerce and industry may count on increases in population to absorb larger and larger outputs, though the increases will be at a diminishing rate, and the speculative builders in the days of our great-great-grandchildren may be obliged to curtail their product to meet the conservative demands of a stabilized population.

### Will styles be permanent?

IF this population has learned to demand "building for permanency" we may even find that commercial office buildings no longer become "obsolete" in 25 years and that well built hundred-year-old homes may be occupied with pride because of the durability of the materials, the skill and craftsmanship of the construction and the basic soundness of the design.

But perhaps the "nub" of the discussion of land uses for those of us who live today and hear the conflicting views



**When we build for permanence old homes will be occupied with pride**



about the agricultural crisis, is in the facts brought together about agricultural production. With the comparatively sudden displacement of horse power by gasoline power, with the changing eating habits of our urban people who desire greater variety and better quality of food rather than more food, with the introduction of new fabrics, such as rayon, manufactured from corn to compete with cotton and silk, we have now fewer farms and fewer farmers.

From 1920 to 1925, the farm population actually decreased some 2,500,000; farm area decreased 31 million acres and land in harvested crops 13 million acres. The total number of farms has decreased more than 76,000 in this period. The value of all farm property shrank more than 20 billion dollars or 27 per cent. Land alone decreased in value from something more than \$54,800,000 to \$37,700,000, or 31 per cent.

### Fewer horses, more mortgages

JANUARY 1, 1925, there were in this country three million fewer horses and mules, six million fewer cattle and 8,500,000 fewer swine than in 1920.

According to Dr. George M. Peterson, the only item to show considerable increase between 1919 and 1925 was farm mortgages, which increased 514 million dollars, or 12.8 per cent on owner-operated farms.

Of course there were many reasons for these changes. The World War with its demands for increased agricultural production, was followed by the falling off in demands as war-torn Europe reestablished its own agriculture.

Release of millions of acres formerly used to grow horse feed has further complicated the overproduction of agricultural products from which we have been suffering.

Perhaps the most unkind and paradoxical cause of overproduction which has depressed agriculture as a business is the efficiency brought about through the teachings of the Department of Agriculture. Of course increased crops and more efficient management of farm animals ought to result in a larger income for the farmer, and they do unless the increased efficiency

contributes to overproduction thus reducing the price and, in aggravated cases, destroying the market for disposal of the surplus crops. This is no argument against efficiency but it is plain that any increase in efficiency great enough to affect the volume of the agricultural output and so bring about overproduction will tend to lower the price of the commodity, thus absorbing the increase in cash returns for those who practice efficiency and lowering the income of those using methods of a by-gone age.

So in the agricultural world, our very virtues have contributed to our undoing, especially as they were accompanied by scientific discoveries and applications of motorization which destroyed the balance between agricultural production and the demands for agricultural products. For the period between 1920 and 1925, the deflation of values in farm lands, in itself, was quite sufficient to wreck any industry.

Judging from the statistical information, deflation is about accomplished; crop land formerly used for live stock not now in existence is being eliminated; increases in efficiency may take care of future increases in population without the necessity of bringing much land back into cultivation.

With the principle established that agriculture will not need great areas not

studies to show economic and social justification for specific lands in specific crops and probable effect on local and total production of proposed crops."

The continuation of the policy of purchasing lands in the Appalachian Mountain System to protect the watersheds of the East is highly important in any general land uses program. It would seem that a reasonable distribution of merchantable growing timber should be provided to supply local regional needs. As it now appears that privately owned forest areas, roughly speaking, may equal the aggregate federal, state, county and municipal forests, it would be useful to prepare and disseminate appropriate studies to foster the scientific management of privately owned forests.

### Forests must be justified

BUT it need not be assumed that land not needed for agriculture or urban uses should necessarily be put into forest cover. Forest uses of land, like all other land uses, are sound only when the use can be justified economically or socially and the results, whether in terms of watershed protection, recreation or timber crop, should always be measured in comparison with the costs.

If, as we believe, the present urban population plus the entire increase in population by the year 2,000—some 70 million or 75 million people—will be living in urban regions, we face problems in the urban regions which create demands for open spaces outside of metropolitan areas. The demand of an urban population for open country will increase. The participation of women in outdoor sports and recreation adds another considerable element in estimating future space for outdoor recreation.

The future will see in addition to the outstanding National Park System, perhaps an equal area in State Parks with increasing areas in country, city and town parks. The need for preserving preeminent

wild scenery as the country becomes more completely occupied is acute. Scenic unspoiled spaces should be inventoried to check their unnecessary destruction for other adverse uses. The Federal Government will administer some of these; the States some, and local

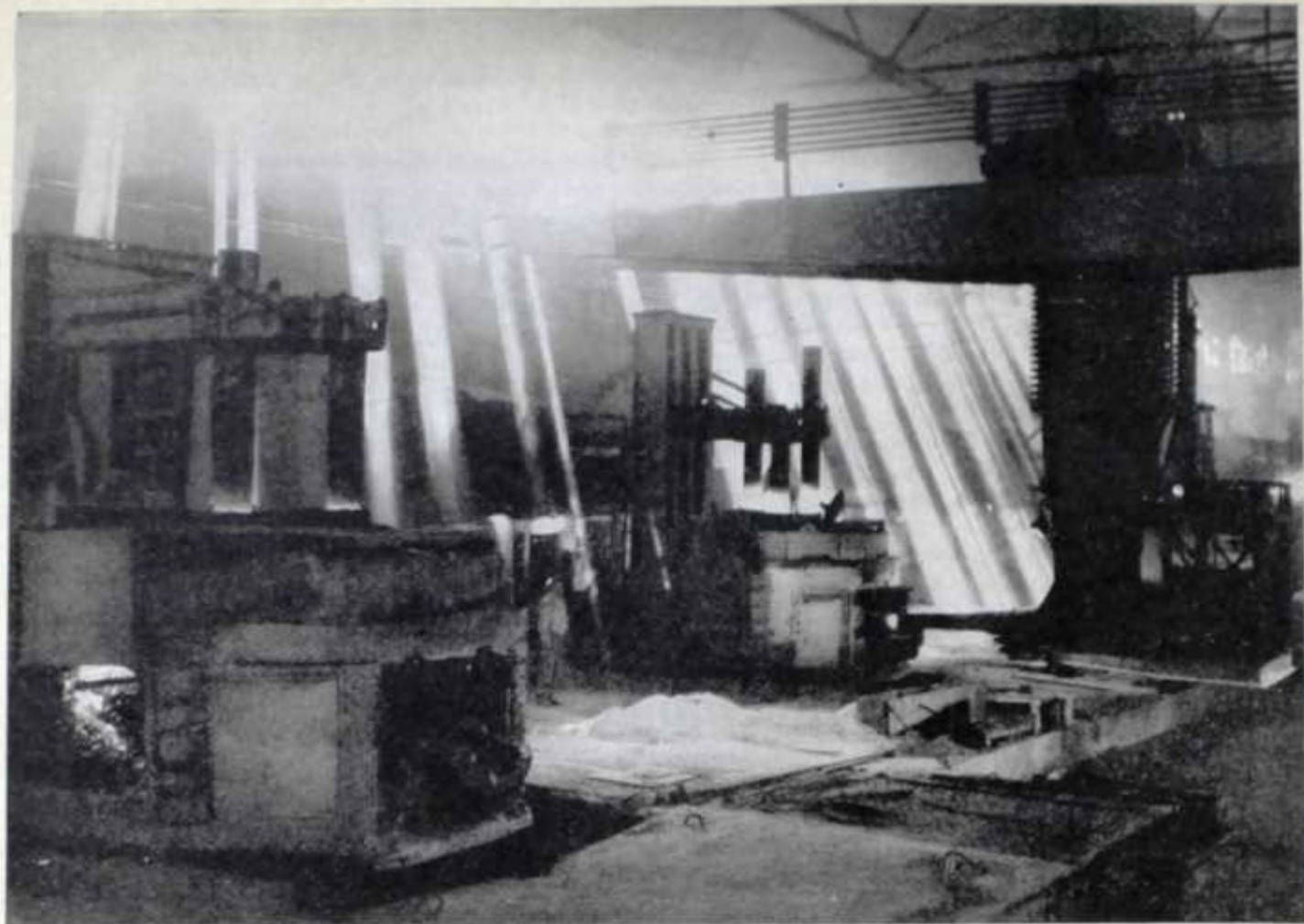
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Already agriculture is decreasing; the only farm item to grow between 1919 and 1925 was the value of mortgages on agricultural property

now in cultivation, we can examine other land needs without being obliged to consider agriculture as a competing demand for forest and other areas. Certainly it would seem prudent, "if public funds are to be spent to reclaim lands by drainage or irrigation, that they should be authorized *only* after careful





HUTCHINGS, WASHINGTON

Electric furnaces such as these play vital parts in producing many of the new metals

# Fitting Steel for the Jobs Ahead

By F. J. GRIFFITHS

Chairman, Central Alloy Steel Corporation, Massillon, Ohio

**A** WEIGHT reduction program that is destined eventually to affect virtually every great American industry is going on in steel. Manufactured and sold for years in ever increasing quantities primarily on a tonnage basis and according to a few standardized formulas, this product is now in a position similar to that of a prosperous citizen who has become too obese. His friends—in this case they are also his customers—are constantly seeking methods of reducing his weight so that he will be able to do better work.

But the transformation is not con-

fined to weight alone. Specifications calling for greater strength and hardness, more endurance, resistance to wear and corrosion, and even the ability to withstand the action of powerful acids are being written in the laboratories of a hundred industries.

## We have custom-made steels

THE steel industry has set out in earnest, after years of experimentation, to write prescriptions to meet the demands of its customers. Although the process is only in its beginning, enough progress has been made to support the assertion that we are entering an Age

of Alloys. This is indicated by the fact that the production of special steels increased 30 per cent between 1927 and 1928 as compared to an increase of only 15 per cent for the entire steel industry.

The beginning of the use of alloys goes back 40 years to the development of manganese steel but with the single exception of the automotive industry, there has been no commercial application until relatively recently. Many authorities now expect to find 50 per cent of the industry on a special or alloy basis within a few years.

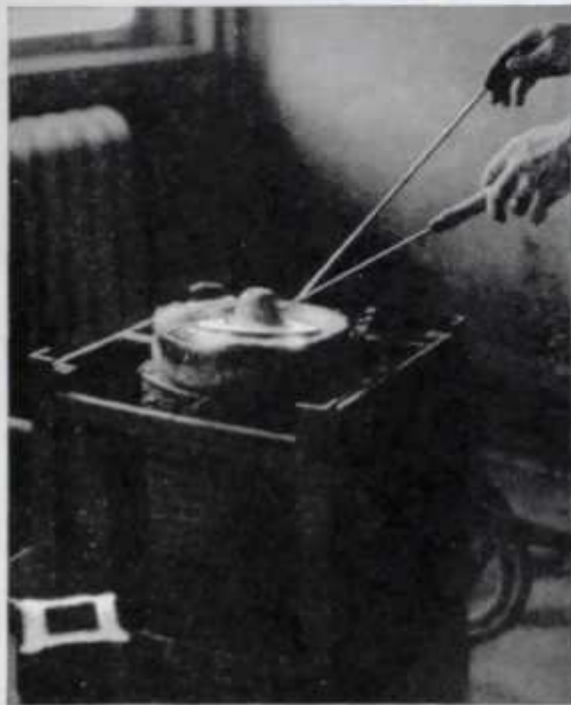
A few years ago while the alloy was still more or less of a laboratory prod-



uct and could be made only in small quantities and at high cost, the potential effect of lighter, stronger and more enduring metals on the various industries was only a matter of scientific conjecture.

Today estimates that seemed fantastic only a few years ago are being exceeded in actual results. Many of the most recently developed metals are still being made only in laboratories, but many more have been put into quantity production. It has been found that every time the price of a special steel is reduced one cent a pound its market is widened ten per cent. The steel industry, therefore, is investing millions in new plants and new proc-

★ **STEEL CASEMENTS** in your home that will not rust and hence need no paint; steel pistons and cylinders in your automobile so hard that friction and wear are minimized; steel in your factory machines and tools so tough and strong that faster and better work can be done. These are just a few of the practical uses of the amazing alloys which are being produced today in the metallurgical laboratories of the world, alloys which promise to have far-reaching effects on both your business and you. Here is an "external force" which you should know about



Alloys are peculiarly a product of the laboratory

esses, and nearly every day a new customer discovers that he can cut his costs and improve his products by using alloys.

Steel men in this country and abroad—particularly in Germany—may claim a great deal of the credit for the actual development of new processes and formulas, but the automotive industry provided the market that made quantity production possible.

In his book "My Life and Work," Mr. Ford describes how he became interested in alloy steels through studying the parts of a foreign motor car wrecked in an American road race. He noted that such small parts as steering knuckles were in some instances less than half the weight and

size of similar parts on the lightest of American cars.

Ford thereupon analyzed the steels, and began a search for a source of supply. Alloys were being made in this country in much the same manner as abroad,

but the difference in labor costs made American prices too high. For a time it was necessary to import certain parts from France and Germany. Then, hardly more than 20 years ago, the first commercial heat of chrome-vanadium alloy steel ever made in an open hearth furnace in America was poured at the Canton plant of the Central Alloy Steel Corporation. That marked the first step



Like a giant, squat teapot the electric furnace is tilted up bodily for the pouring off of its white-hot burden of molten steel

PHOTOGRAPHS BY HORTON, WASHINGTON



toward the fast, light, safe, inexpensive motor car of today. Ever since then automotive engineers and metallurgists have been going over the motor car part by part, replacing ordinary steels with alloys in places where greater strength, greater toughness, resistance to wear and less weight are essential.

### Alloys improve automobiles

AS A consequence it is estimated that about 20 per cent of the steel used in automobiles is alloy, though certain cars use nearly 50 per cent and that the average weight per car is at least 30 per cent less than would be required if straight carbon steel parts of a size to provide ample safety factors were used. Moreover, flexibility and endurance have been increased so that a low-priced car today will give greater mileage without overhaul than the most expensive models of a dozen years ago.

The progress by the automotive industry offers a striking example of the speed with which American manufacturers adapt new ideas. Although most of the alloys now used were originally developed in European laboratories, this country now leads European competitors in their application. The noticeable absence of foreign entrants in the motor car races of recent years shows how completely America has taken the leadership. In racing every pound of excess weight influences the speed attainable with a given piston displacement.

Alloys, of course, have found an even more ready acceptance and a wider use in the building of airplanes, where savings of weight and increased strength are even more imperative.

In addition to the alloys used in all the engine parts, chrome-molybdenum steel is used in landing gear and fuselage tubing to form the structural frame-

work of planes. More recently metallurgists have gone a step beyond the conventional use of alloys. My company has perfected steel sheet which we expect to see before long in the wings of airplanes. It can be made to approximate the weight of the duralumin now used in all metal planes, with a considerable increase in strength.

This strength will reduce the amount of framework and bracing required, so that the total weight of the ship will be less and the payload may be correspondingly increased.

If the market for alloys were confined to these two industries its use could be expected to show a steady increase, but an even greater field is being opened in other industries.

### Railroad cars now weigh less

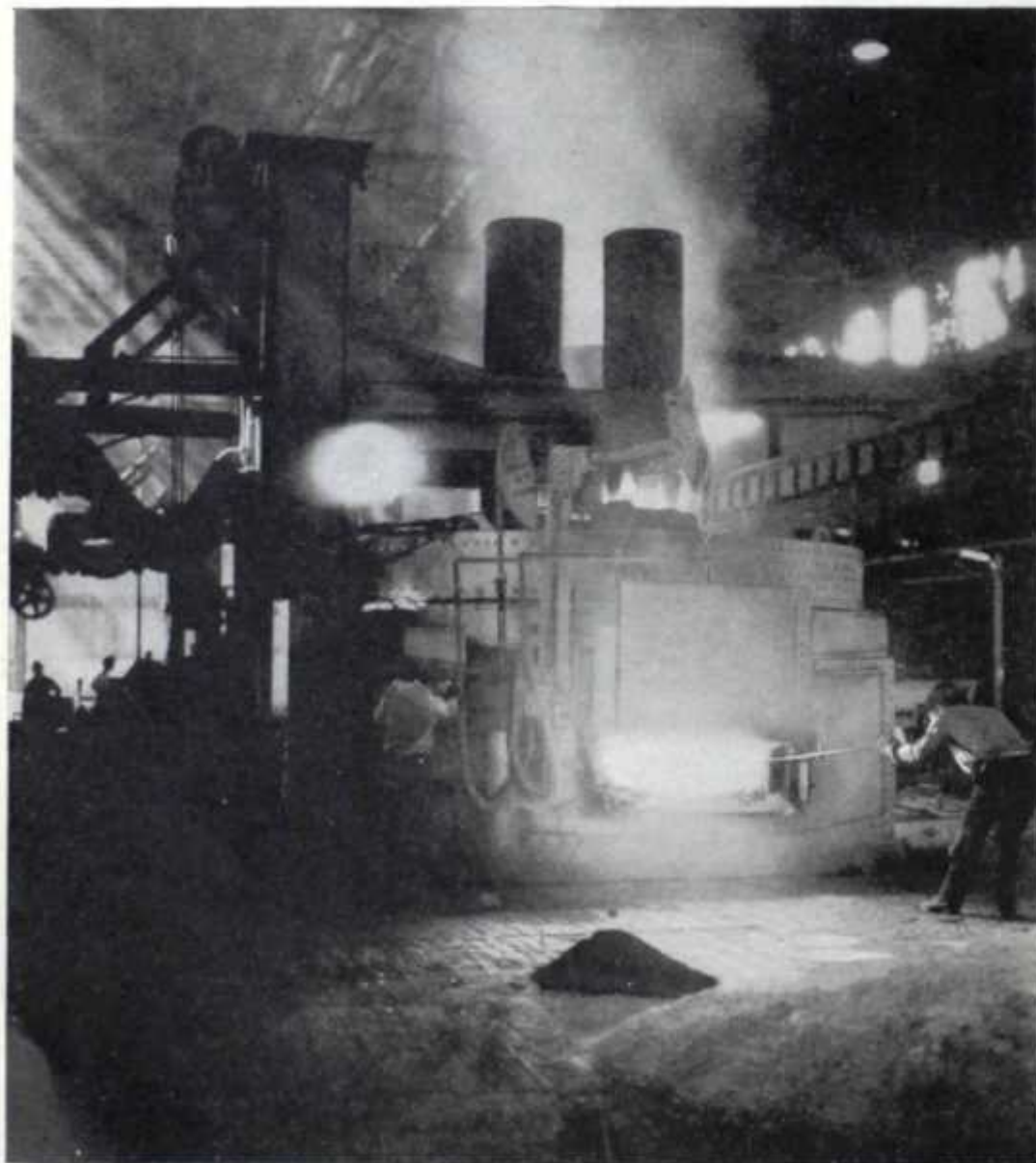
WITHIN the past few months four large railroads have placed initial orders for enough freight cars to make a train 22 miles long, which are to be made of a rust resisting alloy known as toncan iron. This alloy will reduce the weight per car by more than one ton and thereby appreciably increase the number of cars in a train and the payload.

Rust and corrosion are costing \$300,000,000 annually in this country. The saving of this sum would be important but it is small in comparison to the new markets and increased production which may be expected to follow it.

For instance, the average recovery of gasoline from the 912 million barrels of crude oil sent to refineries in this country in 1928 was 41.3 per cent. Some refiners, operating under the most modern cracking processes, recovered more than 60 per cent in gasoline.

If the entire industry had been operated at the maximum efficiency now available, it is estimated that 275 million barrels of crude oil could have been conserved.

Alloy steels and specially processed metals that would stand up under high temperatures and pressures made possible



Waves of searing heat and blinding light burst forth from the furnaces as workmen take samples of molten metal from the fiery interior



the higher yields in the more modern refining plants. Petroleum research workers expect to see this yield increased still more through the use of stainless steels, which resist the corrosive effects and high pressures of existing processes. The same opportunity is being developed in other industries where chemicals, high temperatures and high pressures are essential to improved processes.

Without alloys there could have been no practicable Diesel engine. The Diesel operates at extremely high temperatures and pressures, and the prob-



A giant crane fishes the red-hot ingot up out of the soaking pit

lem was to find metals that would function under such conditions.

Tremendous progress already has been made, but recent advances indicate that even in this already well-developed field we are merely at the beginning. By a new process known as nitriding it has been possible not only to eliminate many of the difficulties and expenses which heretofore attended the hardening of special steels, but also to obtain a remarkable increase in the degree of hardness.

Case hardening as it has been practiced for these purposes consists of packing the finished part, such as an automobile gear, in a carbon compound and heating the mass to a high temper-



PHOTOGRAPHS BY KURT OCEAN, WASHINGTON

Strictly utilitarian are the permanent waves imparted by this giant machine, which transforms sheet metal into corrugated strips

ature. The surface or case of the part absorbs carbon, becoming very hard, while the core remains tough. The necessity for heat treating the part after this operation, however, to retain the carbon in the surface, caused much deformation and distortion and some breakage. In nearly all instances some additional work on the part has been necessary. It is obvious also that the larger and more complicated the part to be treated, the greater the difficulty.

#### Hardens at low heat

BY THE nitriding process, the metal is hardened at relatively low temperature by subjecting it to ammonia gas, thereby causing the absorption of nitrogen.

Since the temperature is low, no subsequent heat treatment is required, and the case is superior in hardness, wear-resistance and other important respects to carbon cased steels. The case of nitrided Nitralloy will scratch glass

with ease. Even special testing files wear smooth without affecting its surface.

The possible application of this discovery to industry is almost beyond calculation. Heretofore, for example, we have had to compromise with friction by using one hard and one soft metal where moving parts came together. That was not so important in a bearing which could be easily replaced, but it presented and still presents a problem in pistons and cylinders.

Both should be hard and strong, but with metals previously available that meant scoring and possible destruction of both surfaces in event of lubrication failure even for a short time.

Nitralloy, however, is so hard and may be made so smooth that a metal-to-metal operation can be performed with a minimum of friction. Lubrication is therefore simplified. In a wide field of industry where the abrasion of friction

(Continued on page 96)



# A Reply to Mr. Flagler

By ROSSEL EDWARD MITCHELL

Washington, D. C., Architect

● IN SEPTEMBER, NATION'S BUSINESS published an article, "Give the Contractor a Chance," written by Thomas Thorne Flagler, president, the Associated General Contractors of America. Mr. Flagler condemned many practices in the construction industry and placed a part of the blame on the architect. No recent contributor has evoked such denunciation and applause. Quite generally the contractor agrees with Mr. Flagler. The architect, just as generally, disagrees.

From the wealth of letters and articles submitted in answer to Mr. Flagler's statements, we can publish only one. It is by Rossel Edward Mitchell, a Washington, D. C., architect, and was forwarded to us by Kenneth Reid, associate editor of "Pencil Points," a journal for the drafting room.

Shortly after Mr. Flagler's article was published, "Pencil Points" urged "some prominent architect who is competent to speak for the profession" to answer Mr. Flagler. Mr. Mitchell came forward as the architect's champion

**"A CHAMPION WANTED!"** is the title of a leading editorial in *Pencil Points* for September. The editors call attention to certain statements of Thomas Thorne Flagler, president of the Association of General Contractors of America, in the September "NATION'S BUSINESS."

Some of these statements, they note, imply that the average architect is incompetent. The editors express the hope that "some prominent architect, competent to speak for the profession, may have an opportunity to write for NATION'S BUSINESS the architect's side of the story."

Prominence is a relative term. As to speaking for the twenty odd thousand or so architects in America, I must enter a demurrer. Further, after reading Mr. Flagler's article, I find myself more inclined to question his literary manners than to dispute his statements.

To be candid, it strikes me that he has "said a mouthful," but said it in a way calculated to do a great deal of harm and very little good.

Mr. Flagler appears to believe that the building business will be helped by his various and sundry innuendos implying general incompetence in the architectural profession. But will it? In the closing portion of his article he appeals to architects to stop the practice of putting irresponsible contractors in competition with responsible ones. Mr. Flagler must know that reputable architects everywhere advocate this policy and that tight-fisted owners frequently override their architects and insist on "cheap" bidders being put on the list.

This class of owner does not think the architects are fully competent to be judges of such matters. Mr. Flagler's statements apparently verify the suspicion of Mr. Tight-fist, and I am sure that his article will confirm their contempt for the architect's disinterested advice, and make them still more inclined to invite such bidders as they please, thus throwing the building industry into still greater confusion.

Mr. Flagler enters a preliminary disclaimer against reflecting on the skill,

integrity or responsibility of the average architect or engineer. He then lays about him lustily, cracking indiscriminately the heads of architects, builders, material people and bondsmen.

Some of his statements as to architectural practice are so unfair and misleading in their implications that they demand rejoinder. The profession of architecture, like that of general contracting, is sick. Neither will be cured by mutual recrimination and assault.

## Specifications in old wording

MR. FLAGLER complains that "Mr. Average Man has an implicit but often misplaced confidence in the so-called specification. This mysterious document consists of from 50 to 250 or more pages, frequently copied from previous specifications, old textbooks and literature put out by energetic manufacturers and material venders."

Well, what of it? Does he expect an architect to originate every new specification out of the raw cloth? Is not the best lawyer he who first informs himself on basic things (text-books), precedent (old specifications), and recent decisions (literature put out by reputable manufacturers, trade associations and engineering bureaus)?

And when did it become disreputable for an architect to use tried and true clauses of specifications that have stood the test of use? Or when did architects, or builders either, become so omniscient they could afford to disregard the wealth of invaluable technical information put out so carefully and scientifically by leading manufacturers and trade associations?

The architect who would venture to disregard these fundamental sources of information would simply classify himself as a fossil too prehistoric for recognition outside a museum.

The president of the G. C. A. now jumps to an absurd illustration of a Chicago architect who specified Vermont granite for a building within sight of



**CHEVROLET***for Economical Transportation*

# 600

## Automobile Fleet Owners *buy* Six Cylinder Chevrolets

Six hundred nationally-known business firms bought six-cylinder Chevrolet cars and trucks during 1929.

Every one of these organizations is deeply interested in economy. And before their business could be secured, it was necessary to prove that Chevrolet could deliver its six-cylinder performance—with exceptional economy. Chevrolet's ability to meet this test was shown over and over again. In some

instances, fleet owners have reported operating costs as low as two and one-half cents a mile—(oil, gasoline and repairs).

The result has been a volume of fleet business totaling many thousands of units during the past twelve months. For, once assured of Chevrolet's operating economy—business concerns have been quick to appreciate its finer performance, greater driver comfort and longer life.

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN  
*Division of General Motors Corporation*



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*When buying a CHEVROLET please mention Nation's Business to the dealer*



## SOME OTHER OPINIONS ON MR. FLAGLER'S ARTICLE



I CAN'T conceive of an architect who has been honored by the architects as Mr. Flagler has been honored by the builders making such loose and irresponsible statements.

WILLIAM B. STRATTON, of Stratton & Hyde, *architects*, Detroit.

MR. FLAGLER'S statements do give a real picture of some of the problems of our industry.

A. P. GREENSFELDER, Fruin-Colnon Contracting Co., St. Louis.

ALL OUR SALES representatives now carry a copy of the September issue (in which Mr. Flagler's article appeared) in their grips.

RANDALL H. MEDICUS, *President*, R. F. Medicus Engineering Co., *architects and engineers*, Youngstown, Ohio.

I WOULD SAY that it does not seem to me that Mr. Flagler has really covered several points strongly enough.

V. L. NICHOLSON, *President*, V. L. Nicholson Co., *general contractors*, Knoxville, Tenn.

WE HAVE BEEN in the construction business more than 18 years and heartily agree with most of his statements.

B. H. HALSEMA, of Halsema Brothers, *contractors and builders*, Miami, Fla.

MY OPINION IS that the surety company building bond, as used at present, is the most objectionable thing the contractor has to contend with.

F. R. McQUEEN, *President*, The Barnett & Record Co., *engineers and contractors*, Minneapolis.

I WOULD LIKE to have copies of this article to hand out to prospective customers who have the idea that the lowest bid is the cheapest regardless of who makes it.

W. D. BERRY, W. D. Berry, *building construction*, St. Petersburg, Fla.

MR. FLAGLER has stated in clear-cut, concise and understandable language the problems that confront the reputable contractor.

HARRY P. GRIER, Jr., Grier-Lowrance Construction Co., Statesville, N. C.

IT IS QUITE EVIDENT that Mr. Flagler has a very complete grasp of the whole situation.

ALVIN H. WEBER, *Secretary and Treasurer*, Henry C. Weber Construction Company, Bay City, Mich.

IT IS A very excellent article from a general contractor's standpoint . . . I observe frequent reference to "irresponsible contractors" but no definition of what an "irresponsible contractor" really is. How may he be singled out?

RICHARD DEMING, *Vice President*, American Surety Company, New York.

THE ARTICLE was decidedly the clearest presentation of the facts involved in the building industry I have ever read.

ALLEN J. KREBS, the A. J. Krebs Company, *general building contractors*, Atlanta.

Stone Mountain, where fine granite grows wild. Has he never seen Oregon apples on the bill of fare of up-state New York hotels? Or California grapes?

My own information on this particular point is that Georgia granites are usually white or nearly so, while Vermont and other New England granites may be obtained in very beautiful colors. If a client wants a beautiful building to crown the crest of Stone Mountain, or some other Georgia hill, and is willing to pay for what he wants, must he, after the contract is let, permit his builder to furnish white granite instead of sea-green, because his builder informs him it is unfair to make him pay freight on granite from Vermont when he figured on Georgia granite, specifications notwithstanding?

Every experienced architect has had just that kind of a proposition put up to him by a "practical" builder, who seems to regard a specification as a "mysterious document," and, like a contagious disease, to be avoided if possible!

### Rule should work both ways

MR. FLAGLER'S next complaint is that "not one set of plans in a hundred is made entirely by the architect and his men." This is interesting, if true. Right here, may I ask in all earnestness, is one building in ten thousand built entirely by the general contractor and his men? Is it not a fact that a more descriptive name for the General Contractor's Association of America would be the Building Contract Brokers' Association?

If the general contractor is at liberty to sublet every single item of labor and material will he deny the architect the privilege of subletting portions of his drafting work?

"If there ever was a case of hitching the cart before the horse this is it," again quoting Mr. Flagler. "Instead of leaving the design of the frame to the last, as is the present practice, it should be the first and most important consideration."

Surely here is a Solomon come to judgment! I have been engaged in architecture for 26 years. I have worked for a number of architects big and little, been associated with some others, and employed many as draftsmen. It is news to me that it is customary among architects to make the structural frame the last thing to be considered.

I have never known that to be done unless it happened to be one of those rare cases of monumental building where architectural design, or the ul-

(Continued on page 154)



# Burroughs



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# Rip Van Winkles

**R**EMEMBER Washington Irving's lovable, irresponsible Rip Van Winkle? How persistently he tricked himself! Time and again when temptation was too strong and nature too weak, he would lift his glass and say, "I won't count this one".

**T**HERE are many Rip Van Winkles in the world right now—some are weak in self-control; some are sadly behind the times in a matter of vital importance to them. They are the unfortunates among the million diabetics in the United States today.

Old Rip's giant spree put him to sleep for twenty years—but "food sprees" are bringing death to present-day Rip Van Winkles because they lack self-control or lack knowledge as to what insulin can do for them.

Thanks to insulin, a diabetic is not confined nowadays to a scanty, spirit-breaking diet. He can have varied and much more appetizing food than was allowed in the old days. But even now, if he fails to find out what he should eat and drink—or if he fails to be steadfast in obeying orders—he practically commits suicide.

When diabetes attacks, it has come to stay. It rarely gives up. A diabetic has one of two choices, either to put up a cheerful, continuous fight or weakly surrender. Half-way defense spells defeat. But a courageous, unyielding fight is almost sure to win.

One great danger is that with the aid of insulin and correct diet, the diabetic feels so much better that he is lulled into a false sense of security. He takes liberties with his diet or neglects to take the insulin as directed. Then, with crushing swiftness, diabetes may claim another victim.

Thousands of diabetics are not even aware of the fact that they are in danger because



© 1929 Metropolitan Life Insurance Co.

they have not had a physical examination which would have revealed the presence of this old enemy of mankind and because, also, during most of its course, diabetes is painless.

Of the 20,000 deaths caused by diabetes last year in the United States, 8,000 were of the acute type ending in coma. Yet a world-famous specialist says, "Diabetic coma is always preventable and nearly always curable . . . Many of my patients have actually lived longer than would have been expected of them had they been normal, healthy people".

The deathrate from diabetes is rising. It can be forced downward. The Metropolitan's booklet, "Diabetes," together with recently published information for physicians and their patients on prevention of diabetic coma, will be mailed free on request.

Ask for Booklet 130-U.



**METROPOLITAN LIFE INSURANCE COMPANY**  
 FREDERICK H. ECKER, PRESIDENT

ONE MADISON AVE., NEW YORK, N. Y.

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★ Speaking of women, Kipling said, "You never can tell 'til you've tried 'em, and then you are like to be wrong." European markets are just as uncertain, but there are ways to avoid being wrong



American oil companies have found the "Open sesame" to the German Markets

EWING GALLOWAY

# Find Out What Europe Wants

By E. BERG

Export Manager, Erwin, Wasey & Company, Ltd.

**S**NAP judgment is too often the sole basis for entering the European markets. In too many cases decisions involving the expenditure of large sums are made by American manufacturers who have been in Europe on flying trips. They have the visitor's viewpoint, and that must, of necessity, be superficial.

## American goods for Americans

I LISTENED the other day at an exporters' meeting to an American who had been in the export-advertising business for years, and therefore, ought to know what he was talking about. This man

was trying to prove that merchandizing conditions in Europe are the same as in this country.

To prove his point he mentioned, among other examples, that grapefruit is now common breakfast food in France. I suspect that this man did not get very far from the Crillon Hotel in Paris during his entire stay there. Grapefruit may be had in France, but I think as a breakfast food it is pretty generally limited to hotels frequented by Americans. By no stretch of the imagination could the grapefruit be called a common breakfast food. This incident is typical of the American traveler's observation of European habits.

Most European countries have districts where American products are prominently displayed. These are naturally the districts where the American tourist hangs out.

A prospective American exporter, vacationing in Europe, will pass several such stores and see many American products displayed. "Gee, this country is going to be a cinch for us," he reasons, "nothing but American goods on sale. These foreigners must be hungry for our goods."

But he is likely to find later on that these stores specializing in American goods represent a very small percentage of the potential outlet for his goods and



that they are not at all representative of the distribution channels he should use.

Then, again, there are the Americans who have lived in Europe but have now been back for several years. Such men are prone to think that they are experts on European markets. They may have been but today their opinions are of little value. European market conditions have changed greatly in the last few years and merchandising methods that were suitable five to ten years ago are likely to be obsolete today.

To find out what your European customers want is not easy. One of the main difficulties lies in the fact that, all claims to the contrary, conditions in Europe are often different from conditions in this country. Over here we can properly generalize when it comes to consumer preference and consumer demand.

Our country is so vast, our population so big and our potential market so

broad, that we can easily afford to ignore our million or so of "individualists" when considering distribution. Our people speak one language and live under one government. Our buying habits and living conditions are fairly well standardized. We are prosperous and need be jealous of no one.

### There is a varied market

HOW, then, can you compare these conditions with those in Europe where there are 40 odd governments with as many different languages; where buying habits and living conditions are different in each country; where unemployment is widespread; where tariff walls are abundant; where nationalistic prejudices are strong; where interstate communication is cumbersome, and where buying power is low?

The only truly accurate way to gauge consumer demand, consumer preference and sales possibilities is to analyze the market and do it thoroughly: American

manufacturers have followed this course for years in developing domestic markets but when it comes to European markets, most exporters seem to believe that the same course is unnecessary.

There are exceptions, of course. A few exporters have realized that thorough market surveys are as essential in Europe as in this country. The list of these wise exporters is identical with the list of outstanding successes in European markets. But that list is much smaller than the list of American exporters that have failed in this rich field. The sad part is that some of these latter exporters don't even know that they have failed; don't realize the fine opportunities they are overlooking in Europe.

It is, of course, more difficult to analyze European markets than domestic markets. With a few exceptions no detailed statistical merchandising data is available in Europe. The Europeans have been more concerned with industrial and agricultural progress than with merchandising.

As a matter of fact the Europeans do not have the same conception of merchandising that we do. They do not even understand why we pay such close attention to the consumer over here. They are inclined, I believe, to ridicule our commercial research activities. In England, for example, research is generally distrusted, according to such an authority as Mr. Redmayne of Cadbury Brothers. On the Continent it is not even distrusted—it is simply ignored.

### Research is different

THIS does not mean, of course, that no European concerns maintain statistical departments. Many go into even more detail than we do, but only a few know how to analyze the facts obtained as having a bearing on consumer preference and consumer demand.

As a result of this indifference toward commercial research little research personnel is available in Europe.

To meet this situation, a number of American manufacturers have sent out questionnaires for their foreign distributors or their foreign advertising agencies to fill in. I have seen a number of these and the information gathered would be amusing were it not so tragic. It is not enough to send out questionnaires—you must also know what questions to ask in each country, you must know where to go for the information, and you must understand how to get the relevant facts.

The futility of canned "Made in America" questionnaires lies not so



EWING GALLOWAY

Königgrätzer Strasse, in Berlin, does not look much different from an American city street until you try to sell American goods there

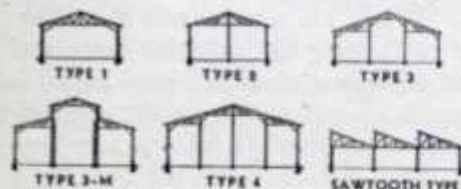


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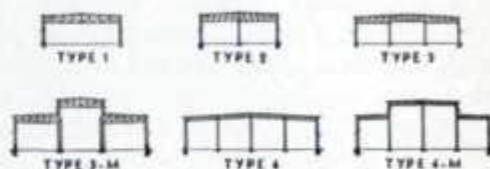
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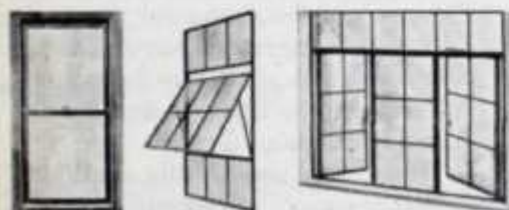
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much in what they include as in what they omit. The conduct of a worth-while investigation has to be adapted to the varying national characteristics of the people being interviewed, and, to evaluate these characteristics, localized knowledge is essential. There is hidden knowledge in every country but it is only available to the man who knows where to go and find it. This of course is true in America also, but it is vastly more so in Europe where business so frequently follows the bypath rather than the broad highways of standardized commercial procedure."

To most European business men, sales management is a matter of checking expense accounts and of holding down salesmen's earnings. Similarly advertising is a matter of beating down rates and deciding what papers to support—with emphasis on "support."

Merchandising is mostly a matter of imitating competitors and issuing price lists. Under such conditions it is not safe

you, sight unseen, that "it can't be done"—that "American methods may be all right for the United States but our country is different."

I know of an American manufacturer of a proprietary product who went to England to introduce his product. He talked with distributors, wholesalers and retailers. He talked with a native advertising agency, with government officials, with consumers. They all told him it could not be done.

### Get the facts, then go ahead

THEN he happened to get in touch with an American advertising agency that had operated in that territory for years. Together they studied the situation; investigated the field without prejudice; analyzed the potential market; compared quality and prices of local competitors, and after a careful review of the facts, they went ahead. I believe that this business today can

swapping goods with other French druggists of the same type.

Each of these druggists represents a certain number of foreign products. They create distribution by sending each other a couple dozen of their specialties. No money is exchanged. It is merely a matter of balancing books. The goods are sold to American and British tourists and the distributor sends reports to America telling about the sale and showing a list of 100 to 200 drug stores handling the line.

When the American finally became impatient, the druggist insisted that it was impossible to do any better because the native competition was so great and the price so high.

"If you will make a real investment in advertising and authorize me to send at least two dozen of your products gratis to each retailer handling similar goods," he wrote, "I will guarantee you national distribution in one year."

The American exporter said "No!" but the contract held. The distributor kept on receiving a low price for himself and cronies, but outside of that no business was forthcoming.

Six months later this American discovered that the big outlet for his products in France was not the drug store but the *parfumeries* and *coiffeurs*. When he finally got out of his arrangement with his first distributor and made a real analysis of the market, his business picked up and is today yielding a satisfactory profit.

### Discouragement

THEN take the case of a famous American soap manufacturer.

I can well imagine the discouragement, the gloom, the calamity howls and sad

predictions with which Europeans greeted him when he first launched his distribution campaign there.

"How," they undoubtedly asked him, "do you expect to compete with the European soap makers? We were making soap over here before America was settled. We know the markets, we know the people's preferences. It is silly to consider that you could compete with our soaps."

But the American went ahead surveying the market. When he was ready

(Continued on page 174)



EWING GALLOWAY

Will the same sales campaign that moves America's auto-riding public be effective with Copenhagen's bicycle-riding population? It has been proved it won't

to accept the judgment of European distributors or European advertising agents in introducing American merchandising methods. Their yardstick is not the same as ours.

But even allowing for the fact that the European distributor often does not have the same appreciation of modern business methods that we have, there is another reason to guard against accepting the European viewpoint unqualified. Europeans often have preconceived notions about American merchandising methods. They will tell

be classed as one of the most successful in its field in Europe. It is certainly one of the most profitable.

Another American manufacturer of toilet preparations decided to enter the French market. He looked over the drug stores in Paris and finally decided to appoint as distributor for all France a French druggist who seemed to carry a big stock of American products and who had a showy place of business.

An airtight contract was signed and the American went home to fill the orders. Meanwhile the druggist began



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Speedy, abundant, economical printing means more in business today than ever before. Circulars to meet today's keener competition and get more business! Office forms to speed up routine operations and prevent confusion!

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How much a Printing Multigraph will contribute toward increasing your annual net profit depends on your business. Many a Multigraph user will tell you that what he saves in printing costs combined with what his Multigraphed material brings in as sales promotion return makes the machine pay its own way with a margin to spare.

Any Multigraph representative will be glad to quote specific figures on results in your own line of business. Look up our local address in your telephone directory—or write us direct.

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# Safeguarding Latin American Loans

By WHITING WILLIAMS

Author of "What's on the Worker's Mind," "Mainsprings of Men" etc.

The inner court of the offices of the Public Works Department of Barranquilla



Barranquillans point with pride to their new waterworks, of which the partially completed filtration beds shown here will form a part

**I**N Barranquilla, the thriving business center of the wealthy republic of Colombia, the visitor will be shown, as quickly as possible, the new municipal waterworks. He will see, without being shown, a surprising combination of tropical and northern prosperities in this city of 180,000—prosperous-looking laborers buying bananas, raw vanilla or great catfish from the owners of primitive dugouts drawn up by the clean and well-painted market at the edge of the Magdalena River; well-dressed men and women driving new, expensive Detroit autos through crowded, though unpaved streets, entering businesslike banking

rooms or purchasing—on the installment plan—the most up-to-date talking machines, furniture, hardware, refrigerators, office equipment and almost every other imaginable product of our factories.

Much of this prosperity is the result of an unusual public-works plan in which the waterworks plays an important part. American dollars are building that plant and over them, guarding each one jealously, stands S. L. Hollopeter, lately of Columbus and onetime associate engineer of the State of Ohio. He is now city engineer and civic commissioner of Barranquilla.

I went with Mr. Hollopeter to inspect the waterworks.

"Why am I here?" he repeated my question, as we admired the shining, American-made transformers which step down the current, purchased from a Colombian-American-owned local light plant, to proper voltage for pumping water from the Magdalena into the

almost completed water filtration beds.

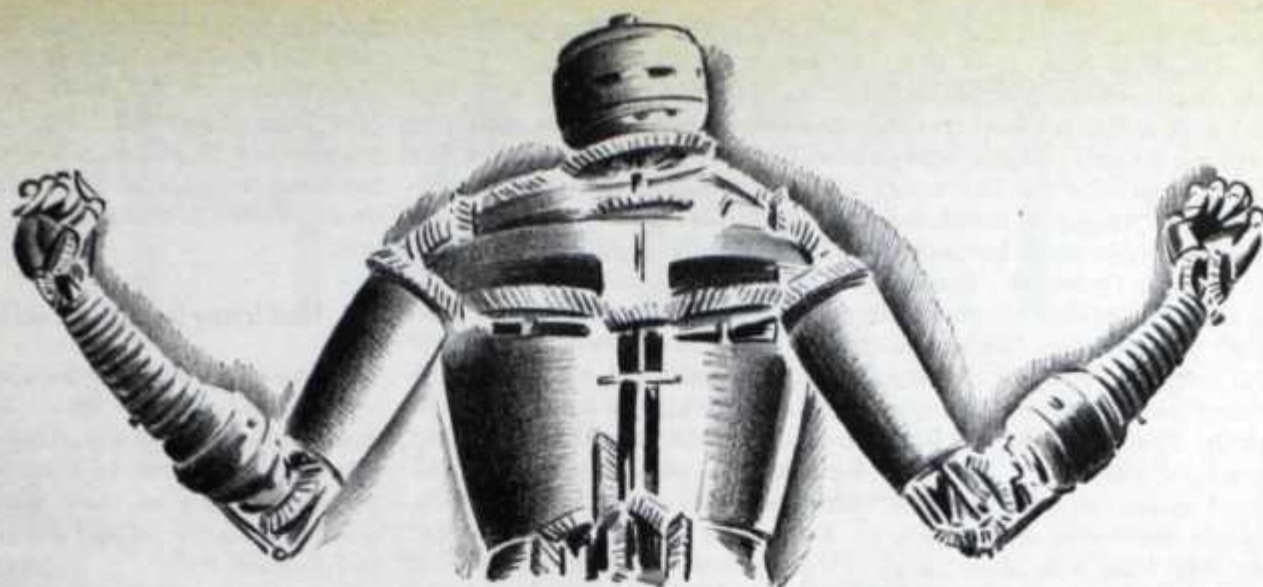
"Well, mainly because this hustling city got tired of paying ten cents for a few gallons of water delivered on muleback from this or that uninspected well.

"But a city waterworks meant an outside loan," he went on. "So the local people got in touch with a Chicago bank. It was arranged that the needed money would be available on satisfactory terms, provided that every penny went directly to the purpose in hand and that revenues sufficient to assure repayment were pledged.

## Simple administration

"THE plan to assure this was simple enough. The municipality here agreed to give full responsibility for the project to a committee, or *junta*, on which should serve the local Mayor, a representative chosen by the local Chamber of Commerce, and myself as chairman, or director general, appointed by the

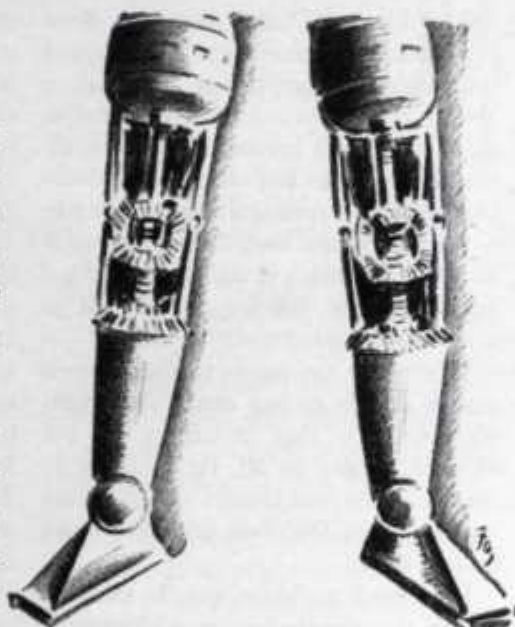




## *For Sale - Mechanical Man Power*

In the last few months we have designed and built efficient mechanical man power (machines) to do work formerly done by slow, expensive hand labor in many of the leading manufacturing plants of the country.

In the last few months a number of manufacturers have increased their percentage of profit, lowered their percentage of waste or improved the finished appearance of their product through better production resulting from the work of Special Production Machines, Inc. For a number of them, we have designed and created machines that they have long needed but have never been able to buy. In some plants our work has been to speed existing machinery . . . in others to re-design



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their semi-automatic machinery to greater efficiency by making it completely automatic. Our work as production experts has included the solution of widely varying types of production difficulties in practically all industries.

The work we have done in these plants is actually saving thousands of dollars . . . In some cases, it has resulted in a better finished product and in a number of cases, the improved machinery and methods we have installed has placed the manufacturer far ahead of competition.

Your plant has production weaknesses that we can eliminate or improve. Send for a booklet describing the services of Special Production Machines, how it operates and how it is serving manufacturers.

# *Special* **PRODUCTION MACHINES**

*A Division of PNEUMATIC SCALE CORPORATION, LIMITED*

*For over thirty-five years Pneumatic Scale Corporation, Limited, has manufactured automatic labor-saving machinery for many of the world's largest producers of merchandise*

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lending bank to represent not so much the interests of the bank as of those who bought the bonds it recommended."

I didn't have to take his word for the way the city is not only enthusiastically enjoying its pure water but has, from the beginning, set aside each month out of income the proper funds for paying interest, reducing principal, creating reserves and also, finally, for showing a profit on the enterprise. Neither did I have to accept his word for the way every citizen joins in praising the plan—everybody, that is, except the local professional *politicos*.

These, of course, see in it all a dire threat against their means of livelihood. Naturally they "view with alarm" any municipal set-up which reduces their opportunity both to hand out fat jobs and to manipulate what, with true Spanish politeness, is called, not graft, but *filtración*—the gradual oozing by which a dollar gets from the passing hand into the passive pocket.

But, despite the alarm of the *politicos*, Barranquilla property and business are today decidedly on the boom. The town can expect confidently to keep up with the opportunities of its location for handling the increasing volume of traffic which flows down the great national river out of Colombia's wealthy interior.

All the needed new pavements, parks, and utilities can be financed as the waterworks was financed. It is only necessary that the local Trusted Trio shall indicate to that northern bank that the new enterprise meets a real city need, that it has been carefully engineered, and that it can be built, operated, and paid for out of operating income or local taxes, without local graft or undue foreign risk.

### Many improvements to be made

SUCH a friendly and altogether useful get-together of spender and lender looks easy and natural enough. But, alas, it is much, much rarer than it should be in a field so full of possibilities not only for everybody in Barranquilla or Colombia, but for all of the rest of us between Tierra del Fuego and the Great Lakes.

Thus, while Barranquilla's business men call each other by their first names at the new Rotary Club, or Colombia's millionaires in constantly increasing numbers leave their plantations or their mines and retire to handsome modern palaces in Barranquilla, with everybody properly gratified and confident that country roads and other improvements will come when needed, many other

parts of Colombia, lacking similar certainties, are troubled.

The federal, provincial, and local governments have already borrowed more than 200 million dollars. Yet they need many millions more to push further the various railways and other enterprises already begun.

The necessity is more serious than it sounds. Discontinuance of these great works would mean unemployment for many thousands, and such unemployment would bring the chance of an industrial disturbance which, headed by local leaders with Moscow training, might turn into a political revolution.

Yet it is by no means the sole fault of these borrowers that the badly needed additional millions are difficult to obtain.

### Handicapped by unscrupulous

"NOT long ago," an American from Bogota related recently, "we accepted into guest-membership at our club a likable young American representative of a fairly well known New York investment house. But after he had arranged to loan millions to a certain city—one which, until he came along to offer it, never dreamed it *had* any credit—he went home, leaving a club bill of several hundred dollars.

"Naturally we wrote to the concern named on his calling card. That company wrote us that this chap was not in their employ at all. He had merely obtained his commission on the loan, and they were therefore unable to make up our loss!"

It is hard to figure who is more to blame, the outside banker who extends that kind of credit or the local heads who accept it and sink great sums in building some railway which to be sure, helps the town or province to feel properly up-to-date and creates a lot of political and other jobs, but which perhaps only runs from the city out into some uninhabited jungle and which therefore will be entirely unable ever to produce more than a small percentage of its carrying charges!

On the whole, it is easy to understand how the proud but inexperienced planners of such hit-or-miss projects come to accept for the benefit of their districts the great sums so carelessly put into their untrained hands.

Less can be said, surely, of the investment broker who does such putting. Altogether too often he is likely to shrug his shoulders and reply that such a situation causes him no personal loss, seeing that he has already collected his profit and neatly gotten out from under.

As a matter of fact, of course, those

bonds arranged by that dues-jumping salesman in Bogota are no longer in New York at all, but in the hands of Mrs. Jones of Jonesville, Iowa, and the young widow Smithkins, who lives just two doors from honest but uninformed Banker Brown of Smithkintown, Montana!

### Bad loans hurt both sides

THIS tie-up of the hit-or-miss spender and the hit-and-run leader is bad enough when seen through those inevitable disappointments of Main Street's investors. It is a lot worse when seen through the eyes of all the political and business leaders of Bogota's Avenida Centrale or Washington's Pennsylvania Avenue, to say nothing of New York's Broadway.

For, sooner or later, this combination which starts out by burning the fingers of those trustful bond buyers out on Main Street, makes it necessary for the Avenida to pay higher interest for the needed additional dollars. This higher interest increases costs, slowing down new enterprises and making jobs scarcer for every wage-earner in Colombia, and hence in our own country.

Besides thus cutting down all the earnings those Colombians would not fail to spend for luxuries supplied by thousands of our own offices and factories, these unprotected deals cause huge difficulties for the State Departments of both countries. Plenty of persons stand ready to rub the resultant disappointments into fierce political issues and flaming international enmities.

By no means all of Colombia's borrowings have been as thoughtless as those described. Indeed, some of them are as good as those of Barranquilla, and the country's huge supplies of oil and other raw materials and her vast acreage of coffee, bananas, and sugar, mean that in the long run few if any American bondholders will lose their investment.

But there is not one of us either here or there whose interests would not be bettered if these vast resources were developed by both borrowers and bankers who made certain to safeguard properly the best, long-run good of both dollar user and dollar owner.

Incidentally, the urgency of a national railway system is indicated by the amazing fact that, in spite of the many railways already built, people of Barranquilla today buy wheat from Manitoba or flour from Minneapolis more cheaply than they can bring it

(Continued on page 128)



# "HABIT"

the greatest danger  
in business today!

**H**ABIT! Harnessed, directed, utilized, what a mighty power! But, left unheeded, to grow and develop at will, what a sinister force! What is more relentless in its demands, more throttling to progress, more avaricious in its greed for time and profits than a Nineteenth Century HABIT stalking in a Twentieth Century office?

Where would Business be today if HABIT had had his way and quill pens and letter presses were considered good enough?

Just how many milestones back along the road to progress would Business be if it had listened to the whisperings of HABIT when he said, "Letters are fast enough. The telephone is a new-fangled, untried contraption. Don't use it!"

How would merchants be faring if they were still hobnobbing with HABIT and dropping in and paying out coins from the "cash till" with a prayer that there be a profit at the end of the month?

What would your business be heading for if HABIT was the chairman of the board — or general manager — or sales manager — or partner — or head clerk? An impossible condition! Yet, not

necessarily an obvious one, for HABIT does not cloak himself conspicuously. He must be hunted. His ways are devious and cunning.

Are you sure, quite sure, that HABIT is not lurking in unsuspected corners of your business? Are you sure that in at least a few ways he has not intrenched himself during 1929 and is girding his loins for 1930?

There will never be a better time than right now, at the fresh start of a new year, to find out.

For instance, how are your business forms requiring names and data being made out? Is each letter of each word being painstakingly written or typed in?

What about statements? Are they headed up by hand? How are factory schedule forms and production forms being made out? How are shipping tags being written? How are stock records being kept? How are collection forms



Latest Addressograph product — Class 1200 Dupligrap. Produces 500 personalized letters per hour. Date, name and address, salutation and body of letter are all printed at one operation from metal type thru same ribbon. Can be operated by anyone in your office. Price \$300 f.o.b. Chicago.

being handled? How are route sheets being imprinted? And what about pay sheets, payroll checks, dividend checks, cost forms, factory time tickets, sales letters, bulletins, price lists, etc., etc. Is HABIT dictating that this work be done by hand? There is another way, frowned upon by

HABIT, that is 10 to 50 times faster!

Thousands of concerns have discarded the ways of HABIT and adopted modern Addressograph methods. Business forms are handled in a fraction of the time, without possibility of error. Expense is reduced, things are done on time, sales are speeded up and profits are increased.

May we co-operate with you in a survey of the methods now being followed in your business? The helpful advice and information we will be able to give you will be furnished without obligation. A letter from you will receive prompt attention.



The Addressograph line is complete. Small machines for small businesses, electric machines for average size businesses, automatic machines for large businesses. These machines operate at speeds from 1,200 to 7,500 impressions per hour — to imprint forms, to produce complete letters "filled in" and to print circulars, folders, etc. from printers' type or standard flat cuts. Small machines from \$20 to \$264.75 — electric machines from \$291 to \$713 — automatic machines from \$591 to \$12,750 — duplicating machines from \$57.50 to \$2,225. Prices are f. o. b. Chicago.

Sales and service agencies in the principal cities of the world

ADDRESSOGRAPH COMPANY, 909 W. Van Buren Street, Chicago  
Canadian Head Office and Factory: Addressograph Co., Ltd.,  
30 Front Street W., Toronto, 2, Ont.

European Head Office and Factory: London, England.

Manufacturers of Graphotype, Addressograph, Dupligrap, Cardograph, Speedumat

**Addressograph**  
TRADE MARK  
PRINTS FROM TYPE



# A CAREER is BORN



IN HUNDREDS of homes tonight a familiar scene will be enacted—a scene simple in its setting yet dramatic in its significance. For it will witness the birth of a career.

A young man, possibly feeling for the first time the serious responsibilities of home and family, is face to face with the fact that the income from his daily work is not adequate to his needs.

Ambitious to get ahead, yet realizing his own limitations—conscious of the need of special training, yet wondering where to get it—he has hesitated between decision and indecision, hope and discouragement.

Then comes the suggestion of an opportunity that may well make this moment the most important of his life. Perhaps the idea comes through a familiar advertisement, or through the chance word of an acquaintance. But however the interest may be prompted, it brings to his aid a new friend and

counselor—the representative in that community of the International Correspondence Schools.

In the quiet of the young man's own home they talk over his problems and his dreams. And out of that talk comes decision. The fire of ambition is rekindled. The future is charted clearly. Special training is provided that will develop his natural abilities.

Tonight—and every night—in towns and hamlets all over the United States and Canada, this service is being rendered. And in every field of business and industry there are men in positions of leadership who will tell you that they owe their success in no small measure to the friendly help and sustained encouragement of a representative of the International Correspondence Schools.

Selected and trained with a serious regard for the work he is to do, the I. C. S. representative is a substantial business man making a constructive

contribution to the welfare of his community. By the very nature of his work, he is equipped to give intelligent assistance in the choice and accomplishment of a career. He is unprejudiced in his advice because he can offer aid in practically any direction. He is backed by an institution with 241 standard courses and scores of special courses, covering almost every business and technical subject.

He is familiar with the needs of industry, and has the co-operation and confidence of many employers. He comes primarily to serve, and he brings a medium of training available to every one because its basis is spare-time study, in the home.

He is an architect of fortunes—a builder of careers—because he helps men to help themselves.

If you wish to know more about the International Correspondence Schools and their service, write for the booklet, "The Business of Building Men."

## INTERNATIONAL CORRESPONDENCE SCHOOLS

FOUNDED 1891  
SCRANTON, PENNSYLVANIA

MEMBER, NATIONAL  
HOME STUDY COUNCIL



# Things Our Merger Has To Face

By LEW HAHN

President, Hahn Department Stores, Inc.

IT HAS been noted in all trade groupings that, as business grows, many theoretical economies are offset by the inertia of the mass. The Hahn Department Stores recognized this problem. Mr. Hahn tells here how they undertook to strike a balance between standardization and specialization, to establish central control and still let units of the group keep their own individuality

## PART II

**I**N the field of retailing, the department store today holds a distinct advantage over all other forms of merchandising. With a few unimportant exceptions, it has maintained a fairly satisfactory volume of sales.

At a time when volume has become a major problem even in the chain-store field, leading to a general shifting of merchandise combinations, department stores have been going through a process of continuous expansion to provide more room for the display and sale of staples and specialties alike. While chain-store enterprises have expanded by establishing additional stores, department stores have grown in their own old locations.

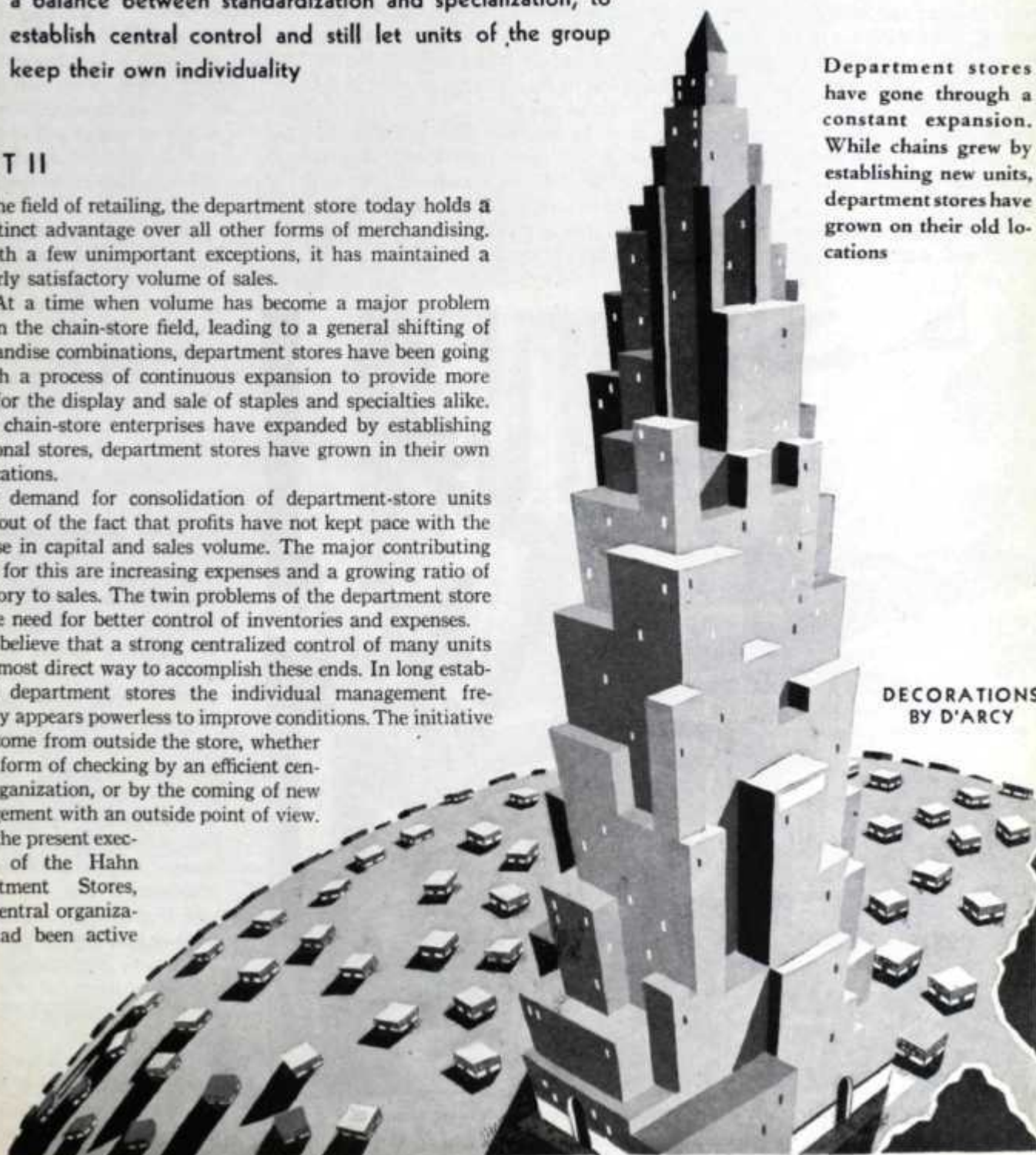
The demand for consolidation of department-store units arises out of the fact that profits have not kept pace with the increase in capital and sales volume. The major contributing causes for this are increasing expenses and a growing ratio of inventory to sales. The twin problems of the department store are the need for better control of inventories and expenses.

We believe that a strong centralized control of many units is the most direct way to accomplish these ends. In long established department stores the individual management frequently appears powerless to improve conditions. The initiative must come from outside the store, whether in the form of checking by an efficient central organization, or by the coming of new management with an outside point of view.

All the present executives of the Hahn Department Stores, Inc., central organization had been active

Department stores have gone through a constant expansion. While chains grew by establishing new units, department stores have grown on their old locations

DECORATIONS  
BY D'ARCY





in the study and analysis of some phase of these problems for years. Some of them had become nationally known as specialists, and many were serving as consultants to various department stores.

### Inventories grew too fast

IN ADDITION, the owners and managers of the individual stores taken into our group, like most other department store men, had been seeking solutions for these problems.

The general growth of retail inventories resulted chiefly from lack of effective merchandise control in a period marked by extraordinary changes in merchandising needs. Notable among these changes has been the multiplication of items within a given line. Although hand-to-mouth buying has made possible smaller stocks in any single line, it probably has encouraged greater variety, and in many cases reductions of inventory in one thing have been more than offset by the increase of the aggregate.

Today's requirements also call for a speed and accuracy which require a

new technique in merchandising. Our war-born prosperity increased all our operating expenses to the point where any increase in volume could not hold them to satisfactory percentage figures. In accounting, in buying, in sales promotion and in merchandising methods the department store has been due for a shakedown or a shakeup.

The problem was complicated by the fact that, although they are fundamentally alike, there is no such thing as exact duplication in department stores. Each of the 29 units in the Hahn system has a distinct individuality, developed by years of experience to suit the peculiar requirements of its own trade. An independent owner hearing of a plan to cut expenses which had worked well in another city often found himself unable to adopt it without endangering the good will which is the major asset of the department store.

How to preserve this individuality and at the same time apply obvious economies and improvements was the subject of continuous discussions in the central office and in the conferences held with the various store heads.

From the start we realized the need of retaining and stimulating the interest of the executives of individual stores. The plans for our central organization and our operating policies all were submitted to our Council of Managing Directors, which includes the heads of all the acquired stores, and were made effective only upon the vote of these executives.

Our plans were complete and included organization charts with detailed definitions of the responsibilities and authorities of each member of the organization. These charts prevent costly overlapping of functions and give each executive a complete picture of his entire job. They likewise tell all the organization exactly what may be expected from each department.

Time schedules were adopted setting forth step by step the work each department was first to undertake, and the dates at which various phases of the job must be completed. Eight operating departments were set up in the central organization.

It is a point of pride among all of us that so far every schedule has been met or exceeded. But what has gratified us still more is that, the first organizing job behind us, we can now place the actual responsibility for operation on the unit store and thin the rank of the first large central organization while preserving all its important functions.

### True picture needed

THE IMPORTANCE of an absolutely accurate picture of each unit in a consolidation, in my opinion, cannot be overestimated. Many mergers have come to grief in the past because of inaccurate or excessively optimistic figures and estimates. Ordinarily these are provided first by the owners or managers of the units to be consolidated, and in most instances they are checked by accountants. But, no matter how truthful the first calculations or how careful the check, the figures inevitably will be colored by the point of view of those whose properties are being taken over.

The man who is selling out quite naturally seeks to present the most favorable picture so he may get the highest possible price. This motive was reduced to the minimum in the build-

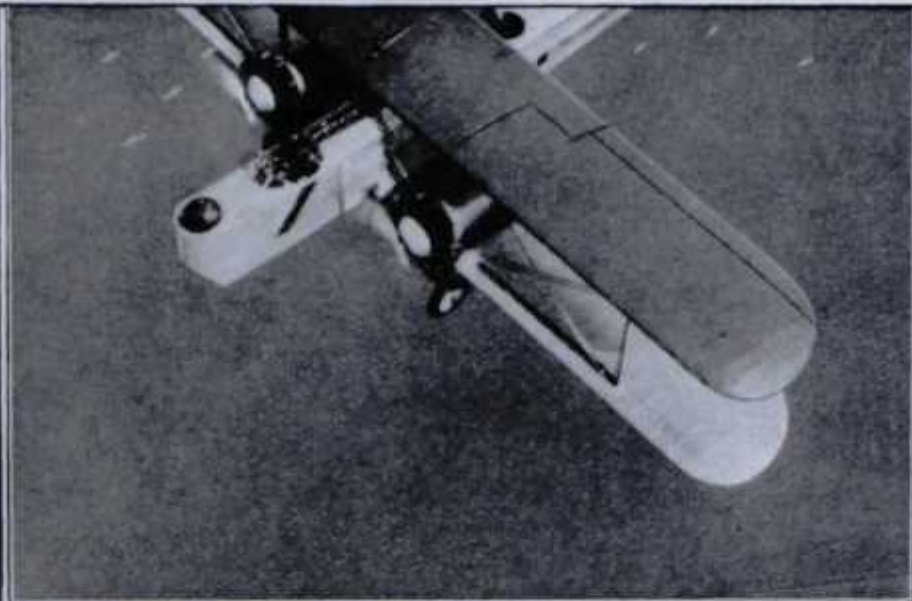


Today's customers call for a speed and accuracy which require a new technique in merchandising not found in old-time operations





## BAKELITE SURVEYS A NATION'S INDUSTRIES



# AVIATION

From the first feeble flight of the Wright brothers at Kitty Hawk, to this day of trans-continental air transport lines, is a period short in time but long in accomplishment. The development of the modern airplane demanded the solution of hundreds of problems. Not the least in importance was the selection, or the creation, of suitable materials. With ever increasing frequency Bakelite Products met these needs. In their various forms, Bakelite Materials are contributing to the operation, safety, convenience and the beauty of modern aircraft.

Bakelite Molded is used for the distributors on magnetos, for encasing sensitive instruments and for engine control knobs. Bakelite Laminated is used for paneling, for pulleys and cable leads and for insulation parts. Clear Bakelite Resinoid has proven superior for oil and gasoline gauges. In other colors, it is used for control stick handles and for lighting fixtures. Bakelite Cement fastens aircraft light bulbs in their metal bases. These few examples merely indicate the wide variety of the numerous uses for Bakelite Materials in modern aircraft.

### BAKELITE ENGINEERING SERVICE


Intimate knowledge of thousands of varied applications of Bakelite Materials combined with eighteen years' experience in the development of phenol resinoids for industrial uses provides a valuable background for the cooperation offered by our engineers and research laboratories. Write for Booklets 42M, "Bakelite Molded" and 42L, "Bakelite Laminated."

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# BAKELITE

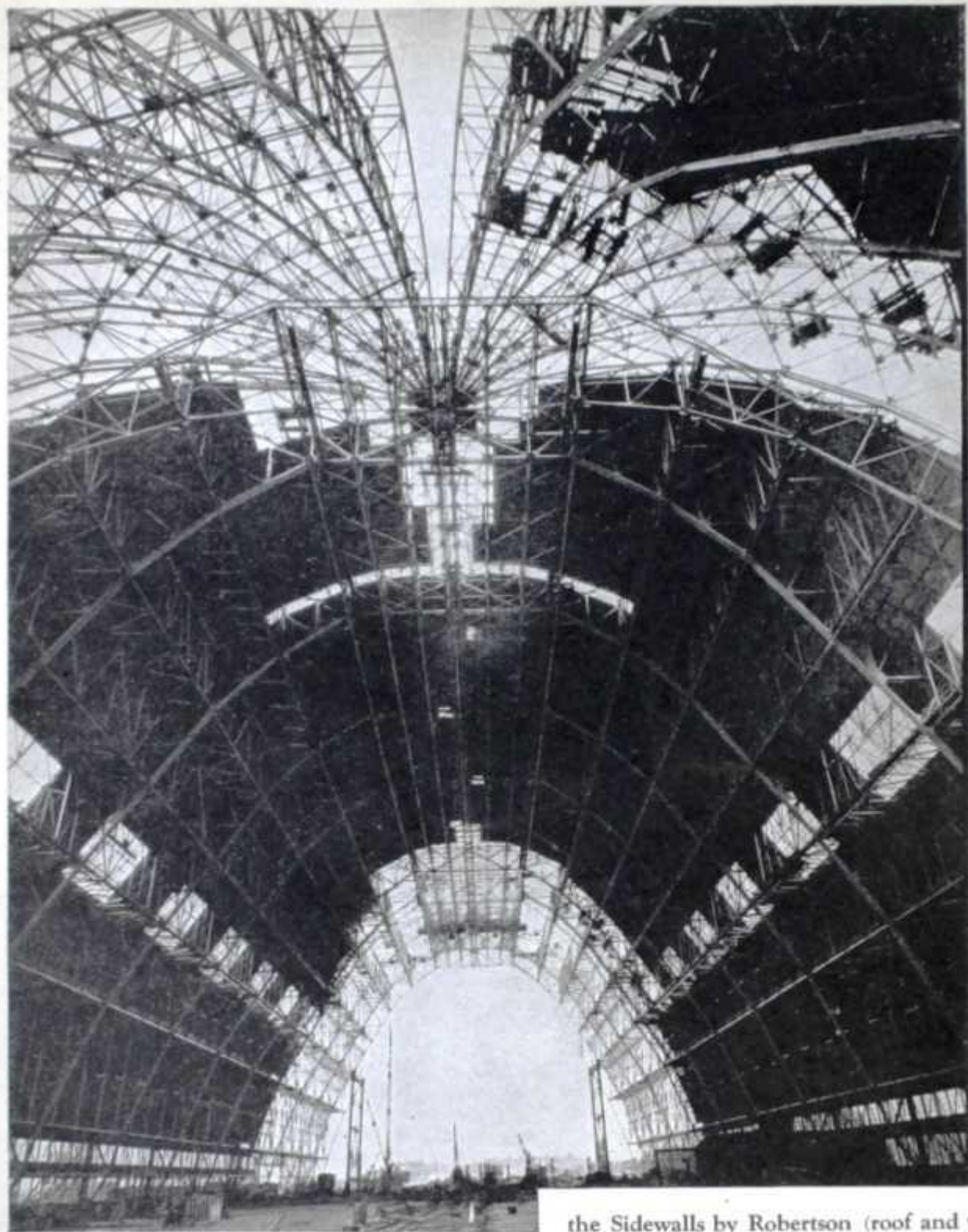
THE MATERIAL OF  A THOUSAND USES



"The registered Trade Mark and Symbol shown above may be used only on products made from materials manufactured by Bakelite Corporation. Under the capital 'B' is the numerical sign for infinity, or unlimited quantity. It symbolizes the infinite number of present and future uses of Bakelite Corporation's products."

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**Before ROBERTSON ~ A Vast Steel Skeleton  
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One of the world's show places. One of the engineering feats of modern times. Greatest self-supporting arch ever attempted in a building. Largest structure in the world without interior supports. Greatest "seaport" on the ocean-of-the-air. World capital of lighter-than-air transportation . . . History will be written here.

Scores of contracts on this project, and even the "little" ones were tremendous ones. Yet the bulk of the work was in two vast contracts . . . and one of these came to Robertson. The Roof is by Robertson and

the Sidewalls by Robertson (roof and walls in this building are measured in acres). The Skylights are by Robertson . . . and on the peak of the building are Ventilators by Robertson so huge that men are dwarfed beside them. Robertson, too, contributed a revolutionary improvement in roofing and sidewall material that gives a combined strength-and-lightness beyond anything ever possible before.

History has been written here.

H. H. ROBERTSON CO., PITTSBURGH

**ROBERTSON**





ing of our organization because the owners of the store units became partners in the new enterprise.

Of the stock issued to acquire stores, the owners have taken approximately 70 per cent. Instead of being relieved of responsibility, they have taken on more of it. Individually and collectively, they

in accounting and other systems are developed.

Our company immediately faced the need for standardized accounting systems. Some of the stores acquired had not been using the retail method of inventory. These had to be brought in line with the others. This standardization

proper control of our inventories. Most stores suffer from the accumulation of old stocks. In our case we met the condition by clearing out slow-moving merchandise promptly. Such merchandise never increases in value by delaying needed action.

We have cleaned stocks and made the capital frozen in such goods available once more for merchandise operations. I cite this as an advantage of consolidation because the organizations which created the condition seldom undertake operations of this kind unless the initiative comes from outside the business.

### Specialists study problems

OUR specialists in the central organization already have undertaken a number of important studies looking toward more economical purchasing and use of supplies—a field which promises substantial savings. This division likewise has improved the layouts of a number of our stores, and is supervising construction of several new store buildings.

One of the most important and interesting departments set up in the central organization is the fashion division. Today there is scarcely a line of merchandise handled in a department store which is not affected by fashion.

The fashion division, directed by an outstanding fashion authority with a complete staff of specialists, advises our buyers in all lines of merchandise.

From this brief outline it will be evident that there is a vast field of operation in addition to buying—which will be discussed later—in which standardization may be established without influencing the individuality of the store.

I might also make clear at this point that the plan of operation does not call for a standardization of name throughout the system. Some of the stores have added the words "A Unit of Hahn Department Stores, Inc." to their stationery and signs, but this has been done only where the local management deemed it advisable, and was able to convince the central organization of the fact.

In all of the departments so far discussed the central organization takes over, standardizes and centralizes services which the separate store units had purchased independently heretofore. That is, each directing manager has tried to improve his position by what had to be experimentation with the services of specialists.

The building of such an organization within so short a time—all the eight divisions were functioning three months after final plans had been approved—



Our Fashion Division assumes the responsibility of advising our buyers of the style qualities of their merchandise

are pledged to the success of the national organization.

The effective operation of a new central organization was absolutely dependent on this cooperation from the store heads and their people, and we have had it in marked degree.

That is why it has been possible to set up this new machinery of management in record-breaking time and with a maximum of results.

Already our New York buying offices are regarded as a model for such operations, not merely in point of equipment and systems but as an essential aid to the effectiveness of our store buyers. Too much cannot be said in appreciation of the fine spirit in which most of our buyers have joined hands with the buying offices.

It will be realized that in stores operated independently great differences

has progressed rapidly until now our figures are on a comparable basis.

Expense control methods have given us more effective budgeting of expenses with frequent checking by the central expense control bureau. The budgeting of personnel has shown many of the stores the way to greater economies and more efficient savings.

### Savings in nonessentials

THERE are many points in the department store where expense can be reduced without impairing service. We have aimed to have our savings provide better service and this has not been so easy. However, we have been able to promote substantial economies without hurting service.

Perhaps the one big problem in any consolidation like ours will always be





## Setting the Pace

A runner cannot hope to win his race if he is unable to maintain the pace and keep up with the leaders. Neither can a business reap its full share of profits if its production methods fall behind the pace set by competition.

Leaders in practically every line of industry today have discarded the slow and costly handling methods of a few years ago because modern equipment lowers costs and correspondingly increases profits. An Industrial Brownhoist locomotive or crawler crane, for example, will do the work of thirty to fifty men, will handle all kinds of materials and is not affected by cold or bad weather conditions.

Industrial Brownhoist has built cranes for the pace makers of industry for the past half century and builds the most complete line of this equipment ever manufactured. Our nearby factory-trained representative can give you valuable help when you are considering your own material handling problems.

**Industrial Brownhoist Corporation, General Offices, Cleveland, Ohio**

District Offices: New York, Philadelphia, Pittsburgh, Detroit, Chicago, San Francisco, New Orleans

Plants: Brownhoist Division, Cleveland, Ohio; Industrial Division, Bay City, Michigan;  
Elyria Foundry Division, Elyria, Ohio

# INDUSTRIAL BROWNHOIST

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has naturally precluded, so far, a detailed analysis of the operating records of the various stores in the system.

We do not know exactly how much, for example, any of these stores or all of them spent in fashion studies before the consolidation, because in most instances this work was divided among several departments. But we believe that the total cost of our central fashion division will be considerably less than the aggregate expenditure under independent operation.

### Fashion information essential

IT HAS already proved that it makes for efficiency to operate a central fashion division, not only in the early discovery of trends and styles and in the early disposal of declining fashions, but also in avoiding mistakes which may cause immediate loss and are certain to do irreparable damage to reputation and good will. Every successful department store stands in the position of a style and fashion adviser to the bulk of its patrons.

Many stores are so jealous of their reputations in this respect that, when they find they have made a mistake, they will sacrifice merchandise rather than risk a loss of local prestige.

The importance of being right on styles cannot be overestimated.

In years gone by, trends in style or in merchandising often required a long time to become national, but that is no longer true.

I do not believe that changes in fashions or methods are any more rapid than in the recent past, but they sweep the country so rapidly that, from the national point of view, they die more quickly. Therefore it is more essential than ever for the local merchant to catch the national trend at its source. It is no longer enough to keep in touch with what nearby towns are doing.

### National view of business

OUR set-up is designed to give this national picture. One of the stores in the original group, for example, had always done a cash business. We recognized that the demand for the charge account privilege is now almost universal. Undoubtedly some stores can continue to hold high volume and make profits on the cash basis. But it is a great deal like standing on one's head to play the fiddle. Consequently we decided to change the policy of the store. Consumers were quick to appreciate the change.

As we see the future, there is no more need for full scale experimentation in





# The vital news of your business delivered every day

*Each department's record every 24 hours*

**Y**OU can't keep abreast of the news if you read today's paper a month from now. Neither can you keep abreast of your business when figures on which you must base decisions are days or weeks late.

Vital figure-facts, such as orders received, sales billed, unfilled orders, accounts receivable and payable, bank balances . . . all should be delivered to your desk every morning at nine. Only by having up-to-the-minute figures before you, can you plan your course intelligently and safely.

With Elliott-Fisher you can get a *daily report* from every department of your business . . . a report posted up to last night's closing that tells you exactly where you stand **TODAY**. You can compare today's position with your position on the same day a week ago, a month ago, or a year ago.

Even when you are away from the office . . . on business affairs or vacation . . . a complete, concise Elliott-Fisher summary may be placed in the mail to keep you

posted quite as effectively as if you were at your desk.

Without adding a man to your payroll, or in any way disturbing your present accounting routine, Elliott-Fisher combines the figure facts of every activity into a single easy-to-read report. Hundreds of business firms that are distinguished by efficient management are Elliott-Fisher owners.

We'd like to tell you more about the part that Elliott-Fisher fact-finding machinery plays in their success.

Use the coupon below and we shall be glad to send you detailed information.



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# Motor Progress

Stimulated by insistent public demand for better motors, Wagner engineers have steadily improved the performance of small motors . . . increasing quietness, efficiency and power-factor; decreasing bearing troubles and adapting the right motor to each individual job (motor in picture is gasoline-proof). Check your motor requirements against the latest Wagner Motors.



retailing than there is in manufacturing. New styles and new methods of doing business, after all, are only the reflections of a demand for better service and more convenience from the public. Yet a deal of the increased cost of distribution can be traced to what might be called experimental merchandising, in which a line that does not catch the popular fancy is closed out and the loss borne by more standard merchandise.

The independent merchant can do very little toward stabilizing prices while this condition exists, yet greater stability would be advantageous to producer, distributor and consumer. A nationwide system can bring to bear as great an influence in this direction in retailing, however, as the Steel Corporation has had in its field.

## Uniform price and quality

NO MATTER how much individuality we preserve in our units, we have already found that much of the merchandise handled is standardized. The percentage will increase with the number of units in the system, so that we shall be able to offer standards in price and quality over a national system heretofore utterly beyond the reach of distribution agencies.

The extent to which we shall succeed in this effort may well determine the increased efficiency of centralized management. It has been noted in all trade and industrial groupings that, as a business grows, many of the theoretical economies are offset by the inertia of the mass. This is particularly evident where the whole operation is standardized.

## Keeping standards up to date

APPARENTLY what is needed is a balance between standardization and specialization. Where this is the aim, an organization will be kept so actively in touch with new markets and new trends that the danger of having the standards become obsolete is minimized.

The acceptance of hazard, after all, is essential to progress in any field. We do not balk at accepting necessary hazard. On the contrary, we believe it will be possible in the organization we have brought together to preserve the pioneering spirit responsible for all modern forms of merchandising, as well as for the progress made in other industries. Without that the best laid plan is doomed to failure.

*(This is the second of three articles by Mr. Hahn. The third will appear in the February number.)*

# Wagner, Quality

Consult Wagner, because Wagner builds every commercial type of a.c. motor.

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Sales and Service in 25 Cities

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YEARS PASS OVER A J-M ROOF AS HARMLESSLY AS A FLEETING SHADOW



McMillan-Bamsey Flying Service

# Buying a J-M Roof is buying Exemption

... Keeping out the weather is but a detail of the job done by fireproof long-lived J-M Roofs ...

IT is not merely to turn the weather that you buy a roof. You want freedom from worry about fire, or maintenance costs. You want the certainty that your property is protected for years to come. You want, too, a pleasing appearance.

You can turn to Johns-Manville with the assurance that whatever the building, whatever its purpose, wherever it is located, there is a J-M roof exactly suited to the job of protecting it for the time you want it protected.

When you buy a Johns-Manville roof you are in good company. Hundreds of buildings belonging to the most exacting owners have been roofed

for years by Johns-Manville. The American Can Company roofed the great plant shown, and many others, with J-M Roofing.

## More than 20 Types of Roofs

This roofing was selected after consultation with J-M Roofing experts, whose impartial advice on roofing problems is available to any building owner, architect, construction engineer or anyone else interested in roofing. Why not take advantage of this expert advice?

Roofing is often a complicated problem. To make certain of providing the right materials for every job, Johns-Manville has perfected more than twenty distinct types of roofs. Not only does our expert help in the selection of the right roof for a given purpose, but a J-M inspector checks every detail during application and inspects the finished roof at frequent intervals thereafter.

Johns-Manville roofs include asbestos or asphalt roofs, smooth or gravel topped—and our method of operating makes certain that your building will

be covered with the right roof. As an added factor to our own guarantee, every J-M roof is guaranteed by the National Surety Company for an agreed term of years.

A striking example of Johns-Manville skill in solving difficult technical problems is the successful subduing, by J-M Sound Control Methods, of noise in thousands of offices and auditoriums. Many varied products bear the J-M signature and on each one it represents engineering skill combined with a thorough understanding of the requirements to be met. Famous J-M items are Asbestos and Asphalt Shingles, Industrial Floorings, Roofing Materials, Motor Car Brake Lining, Refractory Cements, Insulations for temperatures ranging from 400° F. below zero to the highest industrial temperatures, Asbestos Ebony Wood and Insulating Board.

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New York Chicago Cleveland San Francisco Toronto  
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Please send me a copy of your booklet, "Bonded Built-up Roofs." B.U.—3A

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# Johns-Manville

## BONDED BUILT-UP ROOFS

When writing to JOHN'S-MANVILLE CORPORATION please mention Nation's Business



# Science Will Destroy the Laggard

(Continued from page 33)

devil take the hindmost! The test of economic principle in the growth of industrial consolidation is equally conclusive. There is no sign that destructive monopoly is possible in any major field of industrial or business effort.

The physical concentration of manufacturing activity in large producing units is the natural and inevitable result of scientific methods of mass production. It is a promise, not a threat, to national prosperity. Mass production and modern methods of distribution have widened the road of industrial progress, while technical research and development have placed new traffic lights of competition along the highway.

There was a time when every consolidation of branch railways in the United States was viewed as a move toward monopoly. Today the most extensive merger of railway interests in the country could not hope to maintain a monopoly of transportation. Waterborne traffic, the motor car and the motor truck, and the airplane, are among the services that would challenge any single form of transportation that industry may consolidate.

## No monopoly in sight

WITH telephone and telegraph, and cable and wireless competing in the field of communication service, there is no danger that a merger of any two existing communication interests will place the nation in the grip of a communications monopoly. Sight will still compete with sound; the dots and dashes of telegraphy will continue to compete with the telephone for business and general communications service.

In this era of scientific and technical development, when a single invention has sometimes changed the direction of an entire industry, when every new technical achievement brings a new competitive factor, no consolidation of service or manufacturing or sales units can long hope to maintain itself on a monopoly basis. Monopoly is a figment of the imagination in modern large-scale industry. Those who would build upon it must build upon shifting sands.

For many years business worshipped at the altar of competition, with a wide divergence of opinion as to the true nature of the deity. There was the price

cutter who slashed right and left and cried that his cause was just because it was business competition. There were those who exhausted themselves and their competitors in the holy name of competition. There were those who cried, "Monopoly!" when beaten by competition.

Then gradually came the recognition that there were many kinds and varieties of competition. The phrase "unfair competition" became fixed in our legal and business phraseology. Competition could sin, it was discovered. Used fairly and effectively, competition could be a spur to industrial progress; used destructively it was a scourge to business and industry.

## All competition isn't honest

IT BECAME apparent that the rivalry for markets between an inefficient industrial unit and a well knit manufacturing organization was not effective competition; that the struggle of two, or 2,000, individual manufacturers whose only object was public exploitation was not honest competition. It was wastage of economic effort, of industry, of man power.

It became apparent that the simultaneous attempt of several or of many industrial units to occupy exactly the same place at the same time was not constructive competition; it was a destructive force in industry.

True competition is the rivalry between well matched factors for the maintenance of established markets or for the creation of new markets, for better and more economic public service, for higher standards of industrial achievement.

The fact is that the principle of competition must be interpreted in the light of new methods of production, new forms of organization, modern methods of distribution, and new creative forces which have entered industry.

Lately, as industrial progress has pointed to the struggle of vast competitive forces, the cry has arisen, "Competition is dead. Long live the new competition!" The battle for the public purse is to be waged hereafter by gigantic industries, not by individual factors. The entire nation, and even the whole world is to be the industrial battle ground.

Nevertheless, the fact remains that

the greater competition, the rivalry to obtain and maintain industrial leadership, will not be merely in the competition for a share of the public dollar by different industries or services. The force which organized industry may wield through cooperative effort is great enough. But it is not in the massed forces of large-scale production, advertising and sales exploitation at industry's command that most significance lies.

The greater competition, the supplantive competition of modern industry, may be a new conception that awaits fruition in the scientist's mind; a new invention which may undermine an entire industry; a pioneering technical development that may shake an investment of millions of dollars.

From the cauldrons of science new forces of supplantive competition are constantly arising. They take shape as pale ghosts of industrial obsolescence that stalk after every industry that has become so thoroughly "stabilized" that it can only grow around the waist.

The greater competition is the competition between the old and the new. Not merely the competition between those who would make the best rat traps and thus lead the world to their doors, but the competition offered by those who have invented a product, developed a method or found a means that would make rat traps unnecessary.

## All must watch research

NO APPARENT or alleged monopoly can afford to be industrially self-complacent in this era of technical progress. No merger, consolidation or union of similar or related interests can afford to disregard the still small voice of research and invention that may come from the humblest laboratory.

No combination of industrial units, however large, can hope long to dictate prices and terms to the public, when new instrumentalities are constantly being created to compete for similar services.

The science of nutrition as it unfolds its discoveries is forcing even wheat, and meat, and sugar, and starch to fight to retain their places in the modern diet.

Power? Coal, water, gas and electric power lines are at man's command.

In the field of transportation, technical progress is now adding the air-



\* White paints have the highest  
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AT  
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Often such change seriously affects insurance, but the insurance is not always rearranged to keep abreast of modern developments. For when you have "a policy" you feel protected. Yet that protection may be entirely inadequate.

Your buildings, merchandise, fixtures, all have value—value that is changeable. Without them you would be seriously handicapped and at considerable expense to replace them. So every time you make a change in buildings or operation, look for new hazards which may have been created, and cover them immediately with insurance. Study your inventory values regularly. Have some one check your policies and revise them to correspond with those values.

For your convenience the Agricultural agent in your community will be glad to go over your policies and to make recommendations without charge or obligation. Moreover, he is trained to recognize hazards quickly and you can benefit from his past experience in arranging protection against all types of hazards.

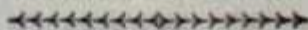
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TRANSIT . EARTHQUAKE  
TOURISTS' BAGGAGE  
EXPLOSION AND RIOT  
AIRCRAFT DAMAGE



plane to the facilities established by the railway, the steamship, the motor car and other conveyances.

The post, the telegraph, the telephone, cable and wireless are now competing for the world's intercommunications.

We may look with equanimity, therefore, upon the further growth of consolidations and mergers which promise the development of great super-power projects that will pool their combined electrical outputs as required; vast groupings of railroad property and other transportation adjuncts; world-wide intercommunication services; nation-wide organizations that will unite the far-flung branches of food distribution; consolidations of chain store enterprises; the further merging of financial institutions; the extension of chain banking systems; and other large-scale projects.

For above the vast organizations of industry and service which may be brought into being to meet the expanding requirements of the nation, stands supplantive competition, a far greater industrial force and a more potent factor in our economic progress than the puny individual competition often worshipped as the "life of trade."

### Industry is adapting science

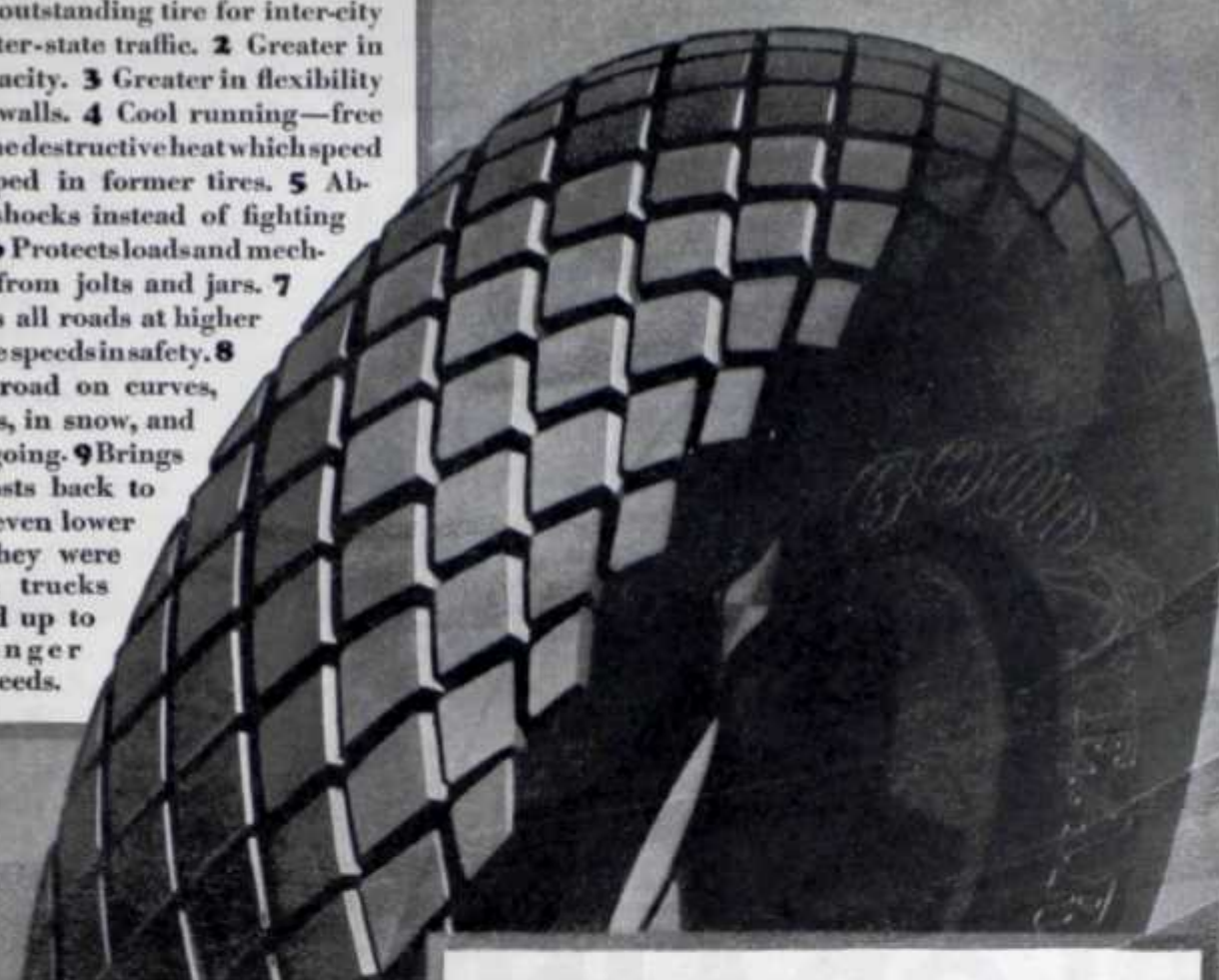
**LARGE-SCALE** industry is gradually adjusting itself to the new competitive forces which flow out of the test tube in the modern laboratory. Developments during the past five years provide some extraordinary examples of industrial adaptation.

The talking machine industry for many years predominated in the field of distribution of speech and music to the home by mechanical means. It became great and prosperous—and thoroughly stabilized.

Then the first feeble efforts of radio broadcasting came through the air. The true significance of this "novelty" was not realized at first in the talking machine industry, and soon the industry was threatened by a young but powerful competitor that had come out of the electrical laboratory.

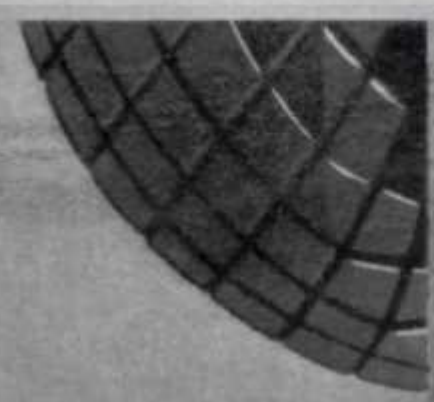
But time made clear what the new art of music and speech transmission could mean to the talking machine industry. Today the old talking machine industry is dead, and a new talking machine industry has arisen in its place—an industry that records music and speech by electrical means, that reproduces sound through the instrumentalities developed in the radio art, and that combines in one cabinet the distinctive





1 The outstanding tire for inter-city and inter-state traffic. 2 Greater in air capacity. 3 Greater in flexibility of sidewalls. 4 Cool running—free from the destructive heat which speed developed in former tires. 5 Absorbs shocks instead of fighting them. 6 Protects loads and mechanism from jolts and jars. 7 Travels all roads at higher average speeds in safety. 8 Holds road on curves, on hills, in snow, and in soft going. 9 Brings tire costs back to levels even lower than they were before trucks stepped up to passenger car speeds.

## Balloon Tires *Goodyear's* newest development for Trucks



**Y**OU know what balloon tires have done for passenger cars. Here they are now for trucks—pioneered by Goodyear.

Put them on your trucks — and end the tire troubles due to high speed, long distance operation.

Let your local Goodyear Truck Tire Service Station Dealer show you how easily the change-over can be made on your present trucks. Specify them on new trucks—manufacturers are rapidly adopting them as original equipment.

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Today, after thirty-five years of crane and shovel building and after five years in which its Lorain 75 has piled up records of far above average performance, Thew produces a better machine than ever before.

Retaining the features of the Center Drive, the Lorain 75 now adds more power, greater ruggedness, smoother and more powerful traction, and other improvements and refinements for fast, profitable production.

You can't be sure you are getting the most for your money until you have investigated the latest Thew—Crawler Crane, Locomotive Crane, or Power Shovel,  $\frac{3}{4}$  yd., 1 yd. and  $1\frac{1}{4}$  yd. capacities.

**THE THEW SHOVEL COMPANY**  
LORAIN, OHIO

# LORAIN



# THEW

services of the radio and phonographic arts.

Consider the industrial and scientific vision of a great American institution in the communications field. The American Telephone and Telegraph Company did not retire within the shell of industrial self-complacency when radio communication began to stretch out to the home.

### Telephone helps a competitor

ON THE contrary, it contributed to the development of the art. It obtained valuable patent rights in radio and adapted some instrumentalities of the new art to the service of point-to-point communications.

It took a prominent part in developing a broadcasting service in the United States. Today radio is the invisible connecting link that has made possible commercial transoceanic telephone service.

More recently the new art of sound recording and reproduction, developed by the electrical and radio laboratories, has come to the motion picture industry. At first the motion picture industry, thoroughly conventionalized, with great groupings of interests that controlled the main arteries of exhibition, saw neither promise nor threat in the new development.

But some producers did sense the revolution which sound combined with sight would create in the motion picture industry. Nor were these producers among the established leaders in the motion picture art who are now hurrying to announce that the "silent" drama is no more.

### Science is in public favor

A NEW attitude toward technical progress is visible on every side. The man who cried, "Get a horse!" is now the proud owner of an automobile. He does not deride the coming challenge of the airship and the airplane in the field of transportation.

Nor is the automotive industry sitting back secure in the knowledge that today it commands the roads of the nation. Leading factors in the automotive industry are participating in the development of an aerial service and thus cooperating in the establishment of another great arm of transportation.

This is the new day of cooperation between advanced scientific progress and industrial development. It is the day of large-scale industry devoted to the larger tasks of industrial organization required by the complexity of mod-





## PUT YOUR CHIMNEY INTO A TEST TUBE

*An interesting one reel film, "The Battle Song of the Cities" depicting some phases of the smoke evil, will be sent free of charge to clubs, churches, schools, or other organizations desiring instructive entertainment for their meetings. Please write our Philadelphia office.*

Right now when chimneys are carrying their biggest burden, because heat as well as power must be furnished by your boilers, is the time to put your chimney into a test tube.

Find out what part of your profits are literally going up in smoke—smoke that may do damage to your city as well as cost you money.

You may find that a change in fuel means added efficiency, lower cost, and less destruction to property and disease to human life. Or you may find that better firing or equipment changes are what is needed to solve your firing problems.

It costs you nothing to call in a Reading Combustion Engineer. He will give you an honest and complete report on what he finds and such recommendations as the facts warrant. No Reading Engineer is allowed to recommend Famous Reading Anthracite unless its use **proves** its greater value.

For homes, of course, there's no better fuel than safe, dependable, clean Reading Anthracite—that better Pennsylvania hard coal.

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President

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## Who's on top — You or Your Records?

UNLESS RECORDS tell quickly, accurately and completely every essential fact about a business they are a burden rather than a help. Antiquated or ill-arranged records make slaves, not only of the people who expend needless labor in keeping them, but of the executives who have to depend on them for facts to guide decisions... National Visible Records concentrate essential facts in instantly available form for posting or for reference. In compact easily handled books, showing banks of 20 to 30 accounts at a glance, records of 10,000 accounts can be kept in 3 feet of shelf space... National Visible Binders are unique because: (1) The back is flat; it expands at



the touch of a thumb-lever for ease in posting. (2) When open for writing, the broad, flat surface of the back holds the book steady and prevents rocking. (3) Flat back construction avoids any hump to interfere with the arm in posting. (4) The posts are straight, polished, and frictionless; this allows sheets to be turned at the flick of a wrist, as in a book.

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ern life. It is a day that demands a new orientation toward industrial and business enterprises.

### Economics force combinations

THE new day demands:

1. General recognition of the fact that large-scale industry and industrial combinations are the inevitable results of scientific, technical and economic development. Modern research has proved that many industries and services are brothers under the skin. Economic forces and efficiency call for their development under unified control.

2. Freedom of industrial development and the leveling of artificial barriers to industrial progress. Modern enterprise has shown that there is a merchandising relationship between ships and shoes and sealing wax.

Modern enterprise has shown that there are economic relationships in the manufacture of a turbine, a refrigerator and an electric lamp; that there are technical and service relationships between wire and wireless between radio development and the motion-picture screen, between communication and entertainment. To keep apart, or to tear asunder, two related elements of industry, is to destroy the possibility of greater public service.

3. The encouragement upon the largest possible scale of scientific and technical research to meet increasingly higher standards of civilization, to insure our national prosperity, and to protect the huge public investment in American industry.

Industrial flexibility, adaptation and vision are balancing forces to supplantive competition.

### A new idea of monopoly

4. CLEARER definitions of monopoly and competition in the light of new forces that have come to modern industry, and the removal of limiting legislative restrictions based upon obsolete conceptions of monopoly and competition.

Technical research and large-scale industry have raised infinitely vaster forces of competition than the corrective forces envisaged in small-scale industry. Monopoly as an oppressive force cannot live where the challenge of supplantive competition exists.

Competition—the supplantive competition of modern industry—is competition grown to man's estate. Supplantive competition is the gigantic force that will mold the greatest industrial combinations of the future.





## DOWN THE YEARS WITH ERIE POWER



A whistle shrieks along the river. Down the track thunders a great Erie freight engine weighing nearly a million pounds and hauling a hundred and twenty-five loaded cars. That is Erie freight power. The development of that engine from the crude wood burners that first traveled Erie rails is one of the romances of Industrial America.

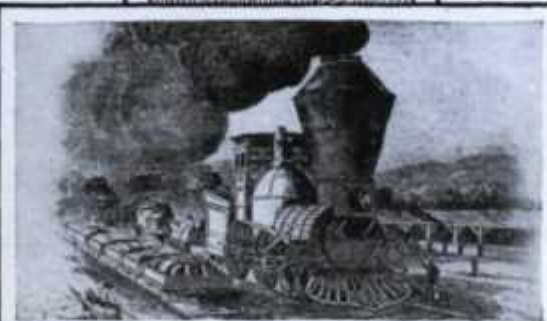
The upper of the group of three locomotives is an anthracite burning engine of the early eighties, and was one of the first to be equipped with air brakes.

The next picture shows the ornate engine of 1864. This type was the first to carry three pairs of driving wheels, which added greatly to its hauling power.



The last is the Steuben, one of the earliest Erie locomotives. It went into service in 1846 just after the Orange, which became famous through its flying trip from Goshen to Piermont in a race between the railroad and stage coach lines to carry the Governor's message to New York. The Orange won. Because of its great size, the Steuben was known as the Giant.

Dozens of types of Erie locomotives have had their day on the rails, to be discarded for new and better ones, but all to one great end; that Erie freight service shall be as dependable as modern engineering skill can make it.



# ERIE RAILROAD SYSTEM

*Route of The Erie Limited*



# On the 1930 Program of Congress

By FRED DEWITT SHELTON

**A**LL eyes at this writing are turned from Capitol Hill to the White House, where the President is taking the lead in a nation-wide co-ordination of economic forces looking to the preservation of business momentum on a stabilized level.

Congress, of course, will play its part. Much of the program contemplated hinges on legislation. The President's message to Congress set forth a wide range of undertakings which the legislative branch is asked to expedite.

The Senate, tired by months of tariff debate and broken into numerous factions of contending interests, put aside tariff schedules November 23, and adjourned. The regular session, which began December 2, brought up the long-deferred problem of seating Senator-elect Vare, of Pennsylvania. Then the bi-partisan accord on quick tax reduction caused that matter to be given preferential treatment in the House.

The tariff bill, which started on its eventful legislative career last May, will not be finished until 1930. The exact form it will take then still remains a mystery which Washington observers assiduously are trying to divine. That rates will favor agriculture, relatively speaking, seems assured if a bill is to become law. The great unknown elements are the fate of the Senate's remodeled flexible clause and the debenture plan—two drastic changes made in the Senate contrary to the wishes of the House and the President. These are matters for adjustment by the joint conference committee of the Senate and House.

## Prosperity

THE public concept of Hoover as a planner, engineer, economist, organizer, administrator and leader of great movements is having its first great test sooner than expected. If the "business stabilization" idea is put into effect now it may be the forerunner of a new phase of the American System which has been the wonder of all nations in recent years.

Labor and management cooperation has spurred the wheels of prosperity.

Now we shall see if coordinated planning and action by leaders in all fields of American life can thwart incipient depression. Vigorous leadership asserted by the President will inspire support in Congress that will expedite the legislative program.

## Federal Highway Aid

FOR SOME time there has been evidence that enlarged expenditures for public buildings and highways would be sought. It now appears that an additional \$175,000,000 will be asked for public buildings and about \$50,000,000 a year more for federal highway aid.

There seems to be general support for annual appropriations of \$125,000,000 over the present appropriation. The sentiment in Congress is favorable and the increase is likely to be granted. Also \$5,000,000 a year may be added to the funds for highways in and to national forests.

## Taxation

PRELIMINARY recommendations of the Treasury call for a tax cut of \$160,000,000. The 12 per cent corporation tax would be reduced to 11 per cent and normal tax on individuals would be lowered by one per cent. Leaders of both parties cooperated to put this tax program through Congress by a simple resolution early in this session so that the reduction will apply to taxes for the year 1929.

## Senatorial Discord

ONCE the tariff bill is out of the way there will be less discord in the Senate. Some time before this Congress expires there may be new leadership of Republican ranks. There are enough progressive regulars not tied to ancient tradition to form a cohesive nucleus around which administration policies are taking form and force. Then there will be recruits from the Old Guard, quite a few from the "progressive" bloc, and a sprinkling of independent Democrats on numerous occasions. Most of the bills scheduled for action will be

of a nonpolitical nature and strictly party divisions will be rare.

## Regulation of Utilities

OPPOSITION of a formidable character has arisen against the Couzens plan for a federal public utilities commission to regulate telephones, telegraph, radio, cables and certain phases of power transmission. The national association of state railroad and public utility commissioners has declared that state regulation is ample and that it will resist further encroachment from the federal government.

As a result, Senator Couzens has expressed a willingness to modify his bill to meet some of the objections of the state utility commissioners. Hearings on the bill will not be started until after the tariff bill is out of the way.

It seems pretty well agreed that the Federal Radio Commission, which under present law would cease to exist December 31, will be indefinitely continued by early action of Congress.

## Muscle Shoals

SENATOR NORRIS now says he will accept the amendment to his Muscle Shoals bill offered by Senator Black, of Alabama, which would provide opportunity for leasing the power plant to private companies which agree to manufacture commercial fertilizer.

If no such lessee can be found within three months the government corporation would proceed to make fertilizer as provided in the original Norris plan.

## Ships and Ocean Mail

THE IMPASSE over ocean mail contracts has been broken and Congress may not feel called upon to straighten out the controversy. Thirteen ocean mail routes have been agreed upon by the Interdepartmental Committee on Ocean Mail Contracts. This will open the way for private construction of ships to the extent possibly of \$250,000,000.

Questions of merchant marine legislation that may come up in this Congress include adoption of the Hague



# Kimberly-Clark Corporation

Manufacturers of Rotoplate,  
Hylaplate, Primoplate, Ser-  
voplate—Perfect Papers  
for Rotogravure Printing



## THE RIGHT START

**I**N advertising, the right start is the product, reproduced with appealing clarity. In a photograph, the atmosphere surrounding a product becomes tangible and the product itself is presented with believable realism. In rotogravure you can reproduce perfectly all the atmosphere and realism of the photograph of your product. There are many different media in which you can make the right start of using rotogravure in your advertising. The list of newspapers on page two of this insert is an almost perfect list of the concentrated markets of North America.



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Atlanta Constitution  
Atlanta Journal  
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Buffalo Courier Express  
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Chicago Bee  
Chicago Daily News  
Chicago Jewish Daily Forward  
Chicago Sunday Tribune  
Cincinnati Enquirer  
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Denver Rocky Mountain News  
Des Moines Sunday Register  
Detroit Free Press  
Detroit News  
Fort Wayne News-Sentinel  
Fresno Bee  
Habana, Cuba, Diario De La  
Matina  
Harrisburg, Pa., Evening News  
Hartford Courant  
Houston Chronicle  
Houston Post-Dispatch  
Indianapolis Sunday Star  
Jackson, Miss., News  
Kansas City Journal Post

Kansas City Star  
Long Beach, Calif., Press Telegram  
Los Angeles Sunday Times  
Louisville Courier Journal  
Louisville Sunday Herald Post  
Memphis Commercial Appeal  
Mexico City, El Excelsior  
Mexico City, El Universal  
Miami Daily News  
Milwaukee Journal  
Minneapolis Journal  
Minneapolis Tribune  
Montreal La Patrie  
Montreal La Presse  
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Nashville Banner  
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New York Il Progresso  
Italo Americano  
New York Evening Post  
New York Herald Tribune  
New York Times  
New York Sunday News  
New York World  
Omaha World-Herald

Peoria Journal Transcript  
Peoria Star  
Philadelphia L'Opinione  
Philadelphia Inquirer  
Philadelphia Public Ledger  
Philadelphia Record  
Pittsburgh Press  
Pittsburgh Sun-Telegraph  
Providence Sunday Journal  
Richmond, Va., Times-Dispatch  
Rochester Democrat Chronicle  
Scranton, Pa., Scrantonian  
St. Louis Globe-Democrat  
St. Louis Post Dispatch  
St. Paul Daily News  
St. Paul Sunday Pioneer Press  
San Francisco Chronicle  
Seattle Daily Times  
South Bend News Times  
Springfield, Ill., State Register  
Springfield, Mass., Union  
Republican  
Syracuse Herald  
Syracuse Post Standard  
Terre Haute Tribune  
Toledo Sunday Times  
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Our book—"One Picture is worth Ten Thousand Words"—shows more ways than ever in which rotogravure may be used. Write for a copy to Kimberly-Clark Corporation, Rotogravure Development Department, 8 S. Michigan Ave., Chicago, Ill.



Rules for uniform ocean bills of lading, provision for merchant marine naval reserve and removal of the Panama Railroad Steamship Company from competition with private ship lines.

### Care of Veterans

A NEW federal department to administer pensions and other governmental functions pertaining to ex-service men is proposed by Representative Williamson, of South Dakota. The new department would take over the Veterans' Bureau, the Pension Office, and other agencies. These bureaus now spend about three-fourths of a billion dollars a year.

### New Farm Proposals

AUXILIARY agricultural measures are being put forward and some will be adopted. Such proposals as the bill to provide federal licenses for commission merchants dealing in perishable agricultural commodities, and the bill to create an agricultural foreign service have strong support and probably will be adopted.

Another possibility is amendment of the warehouse act so as to make additional farm products eligible for borrowing purposes under that law.

President Hoover's enthusiasm for inland waterways is well known. He is advocating improvements in that form of transportation as an aid to getting the farmers' crops to market at low costs.

Agricultural spokesmen have told the President that about \$5,000,000 a year more for agricultural research is badly needed and it is likely additional funds for that purpose will be voted.

### Appropriations

HOUSE subcommittees got an early start on preparation of annual appropriation bills and had some of these ready for House consideration at the beginning of the December session. The governmental program of the Administration is set forth in the budget estimates more clearly this year than ever before, thus marking further progress in the use of the budget as an instrument for planning and control of the Government's activities.

The President has urged that total appropriations be kept to this year's figure, but has indicated ways in which new projects can be financed by reduction of expenditures for other less necessary purposes.

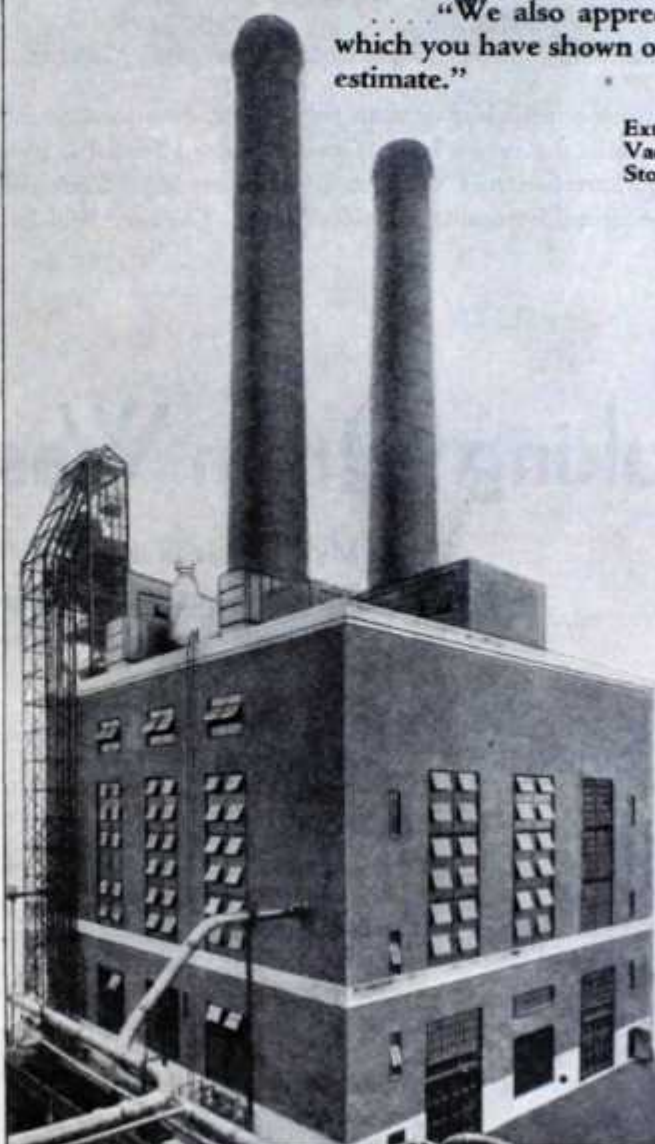
## "The Savings You have shown"

VACUUM OIL COMPANY

"We wish to thank you not only for the interest your company has shown in the erection of this new power house but also the co-operation which was shown our engineers during the course of our negotiations and construction.

"We also appreciate the savings which you have shown over your original estimate."

Extracts from letter from Vacuum Oil Company to Stone & Webster, Inc.



**STONE & WEBSTER  
ENGINEERING CORPORATION**





HENRY MILLER

Passed by the House, the tariff bill went to the Senate Finance Committee for consideration before beginning its adventures in the upper body. Chairman Reed Smoot is seen at the head of the table. On the left side, left to right, are Senators Watson, Reed, Shortridge, Couzens, Greene, Deneen, and Bingham. On the right are Senators Simmons, Harrison, King, George, Walsh of Massachusetts, and Connally



## Looking On in Washington

. . . . "My business in this state  
Made me a looker on here in Vienna."  
—Vincentio in "Measure for Measure."

### The High Science of Tariff-making

**L**OOKING on at the progress—or retrogression—of the tariff bill in the Senate, I am unable to convince myself that my eyes behold any especially spacious struggle over the fundamental principles of tariff construction.

When, for instance, the Senators comprising the "coalition" are assailing higher duties, they invariably assert that the higher duties will raise the prices of the commodities in question and they also invariably assert or assume that these increased prices will transmit their full impact to the wretched ultimate consumer.

When, on the other hand, they are engaged in supporting and promoting a higher duty—as, for instance, in the case of manganese—they are wholly dumb on the topic of the consequent supposed increase of price and they further hap-

pily take it for granted that even if an increase should occur it will be felt not by the ultimate consumer but only by the first purchaser, which in the case of manganese, they believe, will be the United States Steel Corporation.

To such a debate I regretfully find it impossible to accord that full tribute of intellectual admiration which in propriety should flow from the awed private citizen to the legislative masters of our destinies; and yet, at the same time, in order to avoid falling into the error of indicting a whole nation or a whole Senate, I am moved to remark upon the quite exceptional behavior of Senator Alben William Barkley, Democrat, of Kentucky.

SENATOR BARKLEY was the only Dixieland Democrat to vote against the

manganese tariff duty increase. The only other Democrat to be inscribed against it on the roll call was Senator David I. Walsh of Massachusetts. The 16 additional votes cast against it were all of Republicans. Seven of the 16 were from New England. Four of the 16 were from other eastern states which border upon the Atlantic. The remaining five of the 16 were all from states east of the Mississippi River. The general division was clearly one which almost perfectly illustrated the present senatorial tariff philosophy, which consists of geographical considerations slightly wrenched by party politics.

Senator Barkley, however, not being a Northeasterner, and not being a Republican, and in fact being one of the leading Democratic debaters on the side of the "coalition," should have voted not against but in favor of the manganese tariff duty increase, along with the whole main array of the "coalitionists," in order to make the Northeasterners



# DODGE TRUCKS



CHRYSLER MOTORS PRODUCT



## Your 1930 business profits . . increase them surely with a DODGE TRUCK

A new year . . . new opportunities . . . new hopes . . . new plans. And a tried-and-proved way to increase your business profits.

Put your faith in a Dodge Truck. For years these workers have been increasing the earnings of thousands of business men. They have safely put them to work where power was demanded . . . where time limits required speed . . .

where schedules called for dependability . . . where close profit margins made low cost hauling essential. Exceptional performance—on every count—was the result.

See and drive Dodge Trucks—any type, from  $\frac{1}{2}$ -ton to 3-ton, that fits your needs. Get the proof of their goodness by actual test and from owners. Buy one complete with body. Expect

more work and greater profits during 1930—and succeeding years.

### PRICES

$\frac{1}{2}$ -TON—109" wheelbase (4-cyl.) . . .	\$ 525
$\frac{3}{4}$ -TON—134" wheelbase (4-cyl.) . . .	675
$\frac{3}{4}$ -TON—134" wheelbase (6-cyl.) . . .	775
1-TON—133" wheelbase (4-cyl.) . . .	745
1-TON—133" wheelbase (6-cyl.) . . .	845
1-TON—140" wheelbase (6-cyl.) . . .	
Heavy Duty . . .	1065
1 $\frac{1}{2}$ -TON—150" wheelbase (6-cyl.) . . .	1345
1 $\frac{1}{2}$ -TON—165" wheelbase (6-cyl.) . . .	1415
2-TON—150" wheelbase (6-cyl.) . . .	1515
2-TON—165" wheelbase (6-cyl.) . . .	1585
3-TON—135" wheelbase (6-cyl.) . . .	1745
3-TON—165" wheelbase (6-cyl.) . . .	1775
3-TON—185" wheelbase (6-cyl.) . . .	1845

Circle 1, 2, 3, Detroit

SOLD BY DODGE BROTHERS DEALERS EVERYWHERE

*When buying Dodge Trucks please mention Nation's Business to the dealer.*





## transformed with the aid of **MORSE** **SILENT CHAIN DRIVES** into Pins—Locomotives—Clothes

The ordinary pin—the suit you wear—the locomotive that carries you across the country—somewhere in the manufacture of these and in thousands of other varied articles, Morse Silent Chains probably carried power to the machines. In most industries where this superior form of power transmission equipment is used, its silent efficiency of 98.6% over long periods has effected major savings in manufacturing costs—enabled the manufacturer to better meet and defeat the keen competition of present day business.

The Morse Power Transmission Service has been organized to aid industry the world over. Morse Engineers are available everywhere, and there is no charge or obligation in calling for their services. If you wish the facts on power transmission set-ups, call for the Morse Engineer. The new free data file is also available. Write today for it. There is no obligation.

*Morse Silent Chains Drive the largest machines in the world—one of four 100 H. P. Morse Silent Chain Drives from motor to rotary kiln, Great Lakes Portland Cement Company.*



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Branches in Principal Cities

# MORSE SILENT CHAIN DRIVES

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and the United States Steel Corporation feel just as depressed and gloomy as possible. On the contrary, as on numerous other roll calls which I have happened to witness during the present senatorial tariff unpleasantness, Senator Barkley voted in accordance with a fixed theory: the theory of tariff moderation. He voted for it, in the manganese instance, even when it threw him into the same voting column with those two supereminent opponents of the "coalition," Senator George Higgins Moses of New Hampshire and Senator David Aiken Reed of Pennsylvania.

It is sad to observe a man so sunk in theory as Senator Barkley. It is sad to observe a man so neglectful of geographical and political desirabilities and so concentrated upon that sordid science, economics. I fear for Senator Barkley's reputation. He is deficient in loyalty to his party. He is deficient in loyalty to his section. He seems to consider himself a Senator of the United States. There is a sort of uppishness, a sort of rarefied toplofticalness, in that attitude and altitude that is trying to human lungs.

Let us leave Senator Barkley on the heights and descend for safety to his normal colleagues on the practical plains, where theory is discarded and where section meets section in truly human conflicts of sheer blind prejudice and hatred, on the same joyous, boyish level as the sundered athletic relations between Princeton and Harvard.

NOT long ago I talked about the animosity in tariff matters toward the "Industrial Northwest" with a western Democratic Senator, who is as delightful in conversation as he is distinguished on the platform. I ventured to remonstrate with him. I said:

"You voted for the increased manganese duty. Very well. I don't complain. It is true that we have had a considerable manganese duty for some time. It is true that production of manganese under the stimulation of that duty has been scanty and unsatisfactory. It is true that the miners of manganese have yet to prove that any manganese duty, no matter how high, can give us a sufficient domestic manganese supply. It is true that at the present time the duty is a heavy burden on steel companies.

"It is also true, nevertheless, that in these matters we must have a little flexibility, a little generosity. Many northeastern products doubtless are



# ELECTRIC EYES *now continuously reproduce, inside the engine cab, the signals set miles ahead . . .*



**M**ILE AFTER MILE over the Pennsylvania's giant system, automatic signal lights are placed . . . safely guiding the many trains that pass.

Now a new device has been perfected by Pennsylvania engineers and is being extensively installed. . . Electric cab signals which reproduce inside the engine cab the shining lights of the signals ahead. Two miniature sets of signal dials shine directly in front of both the engineman and the fireman, on their respective sides of the cab.

These lights shine day and night through every minute of the run and are instantly and continuously responsive to every change in the signals ahead. And with every change to an unfavorable signal, a warning whistle sounds which keeps blowing until acknowledged by the engineman.

Thus the skill of trained men in the cab and the mechanical perfection of the most modern devices will be combined to insure the safety of Pennsylvania trains. Read the official announcement at right.

## The Pennsylvania Railroad makes an important announcement to the public

**T**HE Pennsylvania Railroad will complete this year the most extensive improvements in automatic signal installations ever undertaken by an American railroad.

The whole program, involving an expenditure of more than \$16,000,000, represents an important advance in the art of railroad transportation from the standpoint of both public safety and operating efficiency.

Three principal results will be effected by the new installations:

1. By the end of this year, the Pennsylvania Railroad's main line tracks, over which its fleet of blue ribbon trains operates between the Atlantic Seaboard and the Mississippi River, connecting New York, Philadelphia, Baltimore, Washington, Pittsburgh, Cleveland, Detroit, Chicago, Columbus, Cincinnati, Indianapolis and St. Louis, will have the most modern automatic signal devices known to railroad engineers.

2. Between New York, Philadelphia, Baltimore, and Wash-

ington, the line will be equipped with a continuous cab signal system. This is the device referred to by the Interstate Commerce Commission in its last report on automatic train control devices in which it said: "the development of cab signals of the type now in use on the Pennsylvania appears to be an important step forward in the art of signaling and worthy of special attention."

3. The coming year will find the Pennsylvania Railroad embarked upon a program to extend its continuous cab signals westward over its main lines.

**T**HESE installations will round out a program of increased train protection which supplements expenditures of many millions of dollars in recent years for all-steel passenger cars, heavier rail, grade crossing removals, automatic warning devices at grade crossings and bridge renewals . . . Of course, all passenger trains on the Pennsylvania Railroad System have had block signal protection on

all of the Company's 16,000 miles of running track for many years.

**N**O phase of the present program is quite as significant as the installation of the continuous cab signals in all trains operating between New York, Philadelphia, Baltimore and Washington . . . This modern development in the art of railroad signaling has been perfected by the Pennsylvania Railroad through research and experimental work and has been incorporated into the automatic train control installations already established at the Interstate Commerce Commission's direction.

The Pennsylvania Railroad management, while complying with the Commission's orders on five divisions, maintains that no substitute can be found for the personal responsibility of the men operating the locomotive and that the best safety devices are those which afford the greatest degree of dependable assistance in enabling the enginemen and firemen to discharge their responsibility.

This is accomplished by the continuous cab signals with whistle and acknowledgment . . .

# PENNSYLVANIA RAILROAD

*Carries more passengers, hauls more freight than any other railroad in America*



View of Boston  
1788



# The Smoke

*marks*

## Paul Revere's Foundry

+

WHERE THE ENERGETIC PATRIOT, AIDED BY U. S. GOVERNMENT, LAID FOUNDATION  
FOR A GREAT AMERICAN INDUSTRY

Above print of Boston was engraved in 1788. The artist, bent on dramatizing Boston's industrial importance, etched the eloquent cloud of smoke. This smoke was from Paul Revere's foundry.



*Business Card of Paul Revere and Son*

Thus, already in 1788, history's midnight horseman appears as a spotlighted Boston manufacturer. Six years later, he began that stirring expansion which established an important American industry.



*Sketch of Revere statue  
modelled by Cyrus E. Dallin*

When writing to REVERE COPPER AND



## THE FIRST NAVY

1794-98 were the years in which United States established its Department of the Navy and built the frigates Constitution and United States. Revere was the only American who knew the "secret" of forging malleable copper, and to Revere went the order for copper spikes, bolts, brass fittings, bronze bells.

## GOVERNMENT LOAN OF \$10,000

But, Revere's cherished objective was an American copper rolling mill. In 1801, government gave him a loan of \$10,000. At Canton, Mass., 15 miles from Faneuil Hall, Revere bought a water-power site, erected buildings, installed copper-rolling machinery and officially established the American copper and brass industry. Now came his greater "ride".



Old Revere advertisement

## BIG BUSINESS IN 1803

In 1803, U. S. Navy alone took \$93,000 worth of Revere copper and brass. Already, Revere copper sheets roofed Boston State House and Old North Church. Boilers of Revere copper were installed in Robert Fulton's steamboat

Raritan. When New York's City Hall was built, the architect turned for its roofing to Revere.

## AFTER A CENTURY AND A QUARTER

But even Revere's dream did not soar to the picture of today. His original company, handed down to son, grandson, greatgrandson, was first merged into the Taunton-New Bedford Copper Company, and last year became the cornerstone of a nation-wide consolidation.

In this consolidation are the two largest copper mills of the country, Baltimore Copper Mills, founded 1814, and the new continuous rolling mill, completed in 1929 by the Rome Brass & Copper Company. With these pioneers of the East are joined Michigan Copper & Brass Company and Higgins Brass & Manufacturing Company, plants that grew with the magic automobile industry of Detroit, and Dallas Brass & Copper Company, ultra-modern Chicago plant serving the industrial West.



Revere House, Boston, as restored

## REVERE IN 1929

These six divisions, operating 25% of the country's copper, brass and bronze rolling-mill facilities, perpetuate the name of Paul Revere in the industry and in the very business which he founded: REVERE COPPER AND BRASS INCORPORATED.

# Revere Copper and Brass

INCORPORATED

Divisions: Baltimore Copper Mills, Baltimore, Md. . . Dallas Brass & Copper Co., Chicago, Ill. . .  
 Higgins Brass & Manufacturing Co., Detroit, Mich. . . Michigan Copper & Brass Co., Detroit, Mich. . .  
 Rome Brass & Copper Co., Rome, N. Y. . . Taunton-New Bedford Copper Co., Taunton, Mass.  
 GENERAL OFFICES: ROME, N. Y.



# MEN WHO USE WIRE



**M**ANUFACTURERS of electrical appliances, apparatus and supplies (like all manufacturers whose cost of labor is a relatively large part of their total cost) will find an unusually favorable situation in Piedmont Carolinas.

From a manufacturing angle, low overhead, high production, and many other economies offered here comprehend a sizeable saving in costs. From a marketing angle, there are facts you should have regarding freight rates, accessibility to the rich Atlantic seaboard cities and a large local demand.

Have you the figures on the number of electric fans, refrigerators, and ranges sold in Piedmont Carolinas alone? The facts may surprise you.

Why not get all the data? In this book, "Piedmont Carolinas", you will find just the information you need—factual, authenticated records of costs, freight rates, markets, etc.

Write for it, and for any other information you may want, addressing Industrial Dept., Room 234, Mercantile Bldg., Charlotte, N.C. You will be answered promptly and courteously.



## DUKE POWER COMPANY

SOUTHERN PUBLIC UTILITIES COMPANY  
AND OTHER ALLIED INTERESTS

blessed with tariff duties which they do not entirely scientifically deserve. Broad minded toward them, we should I admit, be broadminded also toward struggling products of the West.

"So I do not reproach you for your manganese vote. What bothers me, Senator, is what was done by your 'coalition' to, let us say, and for instance, synthetic camphor.

"The case of synthetic camphor was precisely the case of manganese. A duty had been for some time in existence. Production in the United States had not resulted. Production, however, was promised. It was really more than promised. It was in actual prospect. People had invested large sums of money in the prospect. They were about to go to work at it. Their efforts, though, were not in the West.

"What, thereupon, did your 'coalition' do? Even while strengthening the duty on manganese, it drastically lowered the duty on synthetic camphor. I ask you, Senator, was it right?"

The Senator looked at me beamingly but pityingly. "Bill," he said, "of course it isn't right, but it's more than right. It's natural. You don't get justice in the middle of victory."

THAT'S JUST the point. The Southerners and the Westerners are engaged in headlong reprisals. Conceiving themselves to have been devastated and massacred, decade after decade, on tariff occasions by the braves of the northeastern tribes, they now are firing the villages of those tribes and watching the smoke go up to heaven while they paint their bodies with ever deepening hues of triumph and of jocularly. Even if they cannot call it justice, they justify it by calling it due retribution.

They genuinely have got the Senate to the state of mind in which you can attack the Northeast with impunity but you attack the Northwest at your extreme peril.

IN A degree—and in a high degree—the Republican leaders of the Senate have brought this situation upon themselves. They had no mandate, from anywhere, to start in lowering duties on any products whatsoever. Yet they proceeded to try to lower duties on numerous products, including conspicuously some of those which come from the West and from the South—regions which have profited least from our historic tariff structure. They tried, for instance, wholly to abolish the duty on manganese; and they tried to lower—from

\$2.50 a ton to \$1.50 a ton—the duty on china clay, which proceeds largely out of the soil of the state of Georgia. This may have been, to some extent, scientific; but it was not, to any extent, human. The consequences for the alert junior Senator from Georgia, the Hon. Walter Franklin George, were delightful.

He could indignantly exclaim to the Senate, "The shadow of the Manufacturers' Association of Connecticut is across every paragraph of this bill," and he could thus stand forth as a zealous foe of tariff-grabbers.

He could almost simultaneously propose at great length actually to lift the duty on china clay from \$2.50 a ton to \$3.75 a ton, for the precise purpose of obliging northeastern consumers to pay more for it, and incur no odium of tariff-grabbing at all.

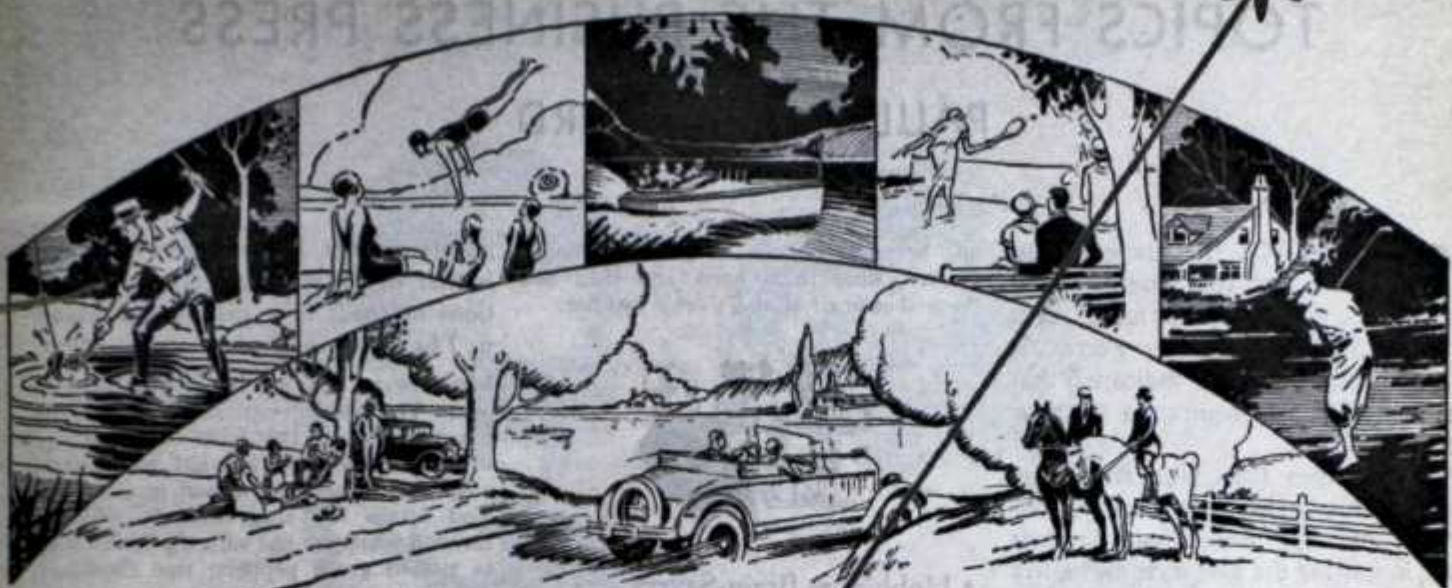
IN THE case of pig iron—or, to speak more strictly, in the case of "iron in pigs"—a report of the United States Tariff Commission showed statistically that the "principal competing country," which is India, could lay down "iron in pigs" on our Atlantic seaboard some \$7 cheaper than our eastern domestic producers. Poor Senator Reed of Pennsylvania seemed to set great store by this dusty fact. The Senate preferred to live glamorously. After some romantic remarks about the United States Steel Corporation, which, as it happens, has no interest in the business of "iron in pigs," the Senate, instead of fixing the duty at \$7, fixed it at 75 cents.

How much more fortunate was casein, which comes from skimmed milk, and, in commercial practice, dominantly from the skimmed milk of the West, and which accordingly enjoys the felicity of being both agricultural and occidental. The existing duty was two and a half cents. The Tariff Commission had reported: "No findings of fact pointing to any change in the rate of duty are warranted." The Senate seemed to be on the point of concluding that in these circumstances a doubling of the duty would be a sufficient concession to agricultural political righteousness. Casein got more, much more, as pig iron got less, much less, than any mathematical student of Tariff Commission figures will ever be able to explain.

Wouldn't it be wonderful if, before proceeding to enact tariff rates, a Senate majority could agree upon a tariff principle, any tariff principle, and then proceed to apply it to all commodities, irrespective of occupational class and irrespective of geographical section?



ONE OF A SERIES OF ADVERTISEMENTS OF INTEREST  
TO MANUFACTURERS IN **212** LINES



# When Kansas City Business is Laid Aside

**B**YOND the end of the business day . . . through leisurely week ends . . . for executive and worker, Kansas City opens its gates to a great outdoors.

An outdoors of varied play-places but a half hour or an hour distant away from the city . . . fishing, picnicking, swimming, boating, golf, pleasant outdoor leisure . . . *the sort of outdoors that keeps industry's personnel most fit!*

Twenty to thirty minutes from Kansas City's industries are Kansas City's homes . . . and just a little beyond, the outdoor play-places.

Kansas City justifiably boasts these advantages—homes so close to work, recreation so close to homes.

Industry's executives know how important healthful relaxation is. It is the super-advantage that Kansas City offers more congested industries . . . one advantage of many that industry will find here.

And business opportunity? . . . Kansas City has many, *with* existing markets, but little or no local manufacture. One of those opportunities may be yours. An inquiry will give you the facts.



INDUSTRIAL COMMITTEE OF THE CHAMBER OF COMMERCE

**KANSAS CITY**  
MISSOURI



*Economical transportation is important. You can reach 15 million people at lower freight cost from Kansas City than from any other metropolis.*

*I am interested in this industry:*

*and I attach the coupon to my letterhead as assurance of my interest, without obligation, of course.*

Name \_\_\_\_\_

Address \_\_\_\_\_



# TOPICS FROM THE BUSINESS PRESS

PAUL H. HAYWARD

**T**HE FACT that the edict has gone forth that blue shoes will be fashionable for men," notes *Shoe and Leather Facts*, "is simply another indication that the men folks are acquiring a footwear consciousness."

But the men folks need encouragement in this tendency, it is tacitly confessed, and shoe dealers can do their part in putting the new style on its feet by putting it on their feet. We read

one of the best sources of trade publicity and style propaganda is not being used as it should be. Here is a great staple industry, in which there are engaged, directly or indirectly, upward of a half-million people. They, in turn, are in a position to influence some millions more. Now why should not every man, woman, and child affiliated with the art and industry be in honor bound to wear such styles of footwear . . . as the Styles Conference may determine upon?

First of all, let no one wear colored shoes unless it is in the new dark blue, after six o'clock. That means that the vast multitude of those who prefer colored shoes during the day-time will need at least an additional pair of dark blue shoes for evening wear. Don't wait for some one else to lead off, but remember that we all have some influence and when it is exerted together it becomes a tremendous factor.



## ♦ A Five-Year Job

DAME FASHION may, in truth, be a fickle gypsy, but modern women are going to be slow in yielding to her blandishments as regards longer skirts, if we may believe Dr. Paul H. Nystrom, professor of marketing at Columbia University, as quoted in *Sales Management*. Except for formal wear, at least five years will be required to educate the average American woman to adopt the longer skirt style, and

there is still resentment among women against the move to lengthen skirts, Dr. Nystrom said. Although ready-to-wear dresses are being made longer, retail stores have found their alteration expenses going

up, because women bought the longer dresses, wore them once, and then had them shortened at the store's expense.



## ♦ Hobbies as Brain-Savers

"IT IS dangerous practice for a man to carry all his mental eggs in one basket," writes Dr. Louis J. Karnosh, Cleveland psychiatrist, in *The Cleveland*. "Let his one all-consuming drive end in disappointment, let his one love interest fail him, and he becomes utterly stranded. The future looks utterly void." A hobby, Dr. Karnosh continues,

is one way of dispersing emotional powers over a wider field, of making the individual more elastic. If more American business men had hobbies, it would reduce the common American neurosis. . . .

I went out one evening to see a man whose business had crashed because of his partner's mistakes. There he sat mulling over those checks, again and again. He had never had time to play. He had never taken time for any diversion, his wife said. So when his business was taken from him, he went insane.

The American business man believes that hobbies of a cultural nature are beneath him. He works hard, keeps himself out of sight. He spends his life eating, sleeping and working. Consequently the mental depression which comes in mid-life falls upon the man who has centered his life on one interest—business.

Hobbies tend to round out an individual, and until a man blunders into some sort of diversion he never knows his creative potentialities. No hobby is genuine unless it is associated with a great deal of feeling, tone and pleasure. It doesn't matter if the hobby is creative or recreational—cultivate one.

## ♦ Where Taste Counts

COMMERCIAL artists have their problems, no less than other men of business, we learn from Carl Neher, whose specialty is the depicting of tempting fruits, meats, or what have you for the various food companies'

advertisements. One of these problems is that of getting the proper combinations of foods in a picture, he reveals in *The Poster*, and adds

Lima beans are an interesting case in point. The problem here is to combine the beans with foods that have color, because in themselves they are not particularly adaptable to appetite appeal in a picture. You attain the suggestion of edibility through what you put with the beans, such as stuffed green peppers, ripe tomatoes, and things of that sort.

In utilizing this idea we showed large red apples from which part of the pulp had been removed and replaced with lima beans. The dish looked beautiful but it was a failure from the standpoint of food combinations. We then tried ham and beans, separating a pink slice of ham in places and putting layers of beans between. This was a success from the start. The eye appeal was there and people did not resent the thought of ham with beans.



## ♦ Fable of the Wise Asses

WE STRIVE to deal with facts rather than with fables in this department, but here is a fable, contributed by J. B. Brown to *The Building Exchange News*, which contains enough fact to make it well worth transcription:

At the beginning of things, when the world was young, the donkey was esteemed . . . as the wisest of animals.

The good Sheik El-Sta-Shun-Air owned a great herd of these sagacious beasts, which was the pride and joy of his life.

Other Sheiks came . . . to listen and marvel at the wisdom of the herd. At such a time came the Prophet himself—most learned and wise of all the sons of the East. With much glowing pride El-Sta-Shun-Air led him out to the herd and said:

"Behold, O Prophet, the wise and talented asses. Converse with them . . . and see if they are not verily wiser than forty trees full of owls."

Then the Prophet addressed the asses. "Let us test your wisdom," said he. "Answer me this question: What should an ass require for a three days' journey?"



# Men.. Women...



*We cordially invite anyone interested in the manufacture or sale of fractional horsepower motor appliances to inspect personally our factory and facilities.*

## and Minutes

Increased production... greater earnings... more leisure—marvelous indeed has been the work of small motors in cutting minutes off manufacturing processes... household tasks...

More and more are manufacturers of electric-motored appliances demanding motors of greater efficiency and fitness. More and more are they insisting on motors especially designed for their particular appliances. Experience has taught them that it is too costly to entrust their success and reputation to motors that are "readily adaptable to any appliance".

In a measure this trend accounts for Domestic's continued growth... for the steady increase in the

number of clients and industries served. Manufacturers, large and small—national and world-wide—have found the unique service of Domestic Electric a vital factor in their business success.

More than once, Domestic Electric has aided a manufacturer to establish new economies in appliance design and production... and more profitable methods of merchandising, for Domestic Electric's type of service does not end with the design and manufacture of fractional horsepower motors alone.

Whether a manufacturer of electric-motored appliances in the household, commercial or industrial field, you will find Domestic Electric worthy of your confidence and counsel.

THE DOMESTIC ELECTRIC COMPANY  
7209-25 St. Clair Ave. Cleveland, Ohio

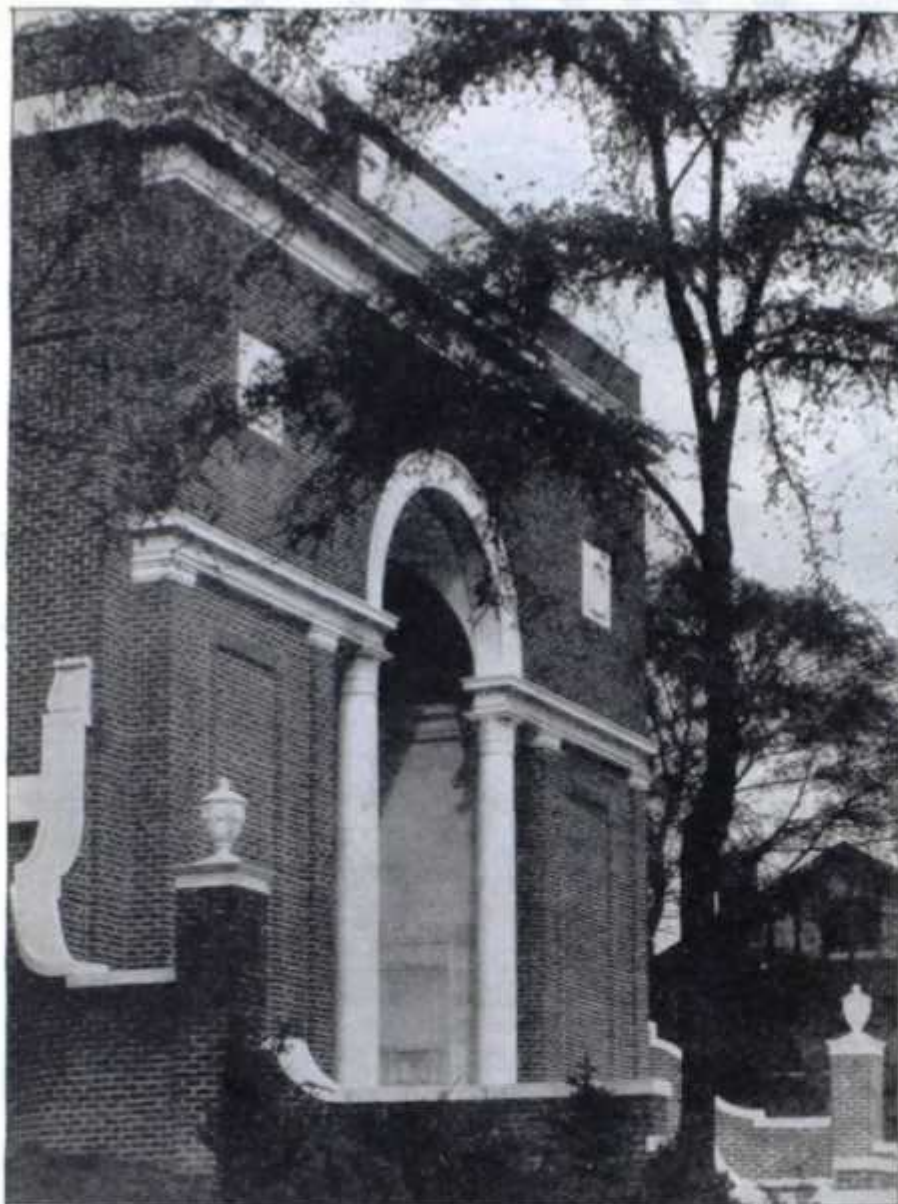
**Domestic**  
FRACTIONAL HORSEPOWER  
**Electric Motors**

SMALL MOTOR MANUFACTURE • • APPLIANCE ADVISORY ENGINEERING



# GEORGIA MARBLE

*is a dependable material . . .*



OCHS MEMORIAL TEMPLE—CHATTANOOGA, TENN.

Bearden & Crutchfield, Architects Henry B. Herts, Associate Architect

**I**f you want your new building to be "good architecture", Georgia Marble merits your consideration . . . The use of Georgia Marble, whether for the whole building or a modest quantity of trim, affords your architect the opportunity to make a finer design . . . It is available in white, grey, pink and special colors.

Georgia Marble holds favor with architects who do not wish to risk their clients' funds on uncertain materials.

## THE GEORGIA MARBLE COMPANY • TATE • GEORGIA

1328 Broadway 814 Bona Allen Bldg. 648 Builders' Bldg. 622 Construction Industries Bldg. 1200 Keith Bldg.  
NEW YORK ATLANTA CHICAGO DALLAS CLEVELAND

When writing to THE GEORGIA MARBLE COMPANY please mention Nation's Business

And they made reply: "For a three days journey, O Prophet, any ass should require six bundles of hay and three bags of dates."

"Very good," quoth the Prophet, "that soundeth like a fair and proper price." Whereupon El-Sta-Shun-Air broke into loud chuckles and said: "Did I not tell you they are passing wise?"

The Prophet answered, "Wait," and again addressed the asses, "I have one for you," he said, "three days journey but I will not give you six bundles of hay and three bags of dates for making it. Let him who will go for less, stand forth." And behold, they all stood forth and began to talk at once. One would go for six bundles of hay and one bag of dates, until finally one especially long-eared ass agreed to go for one bundle of hay.

Then spoke the Prophet: "Fool," quoth he, "you cannot even live for three days on one bundle of hay, much less profit from the journey."

"True," replied the long-eared one, "but I wanted the order."

And from that far-off day to this, asses have been known as fools and price-cutters have been known as asses.



### • Truck-Riding Executives

"ONE OF the criticisms directed at some of the great mergers," we read in *Printers' Ink*, "is the fact that the new executives don't keep as close to the public as the old executives did when they were running smaller concerns."

"And yet," the editorial continues, several incidents recently tend to prove that in some of the very largest companies the big executives know the value of keeping close to the person with the pocket-book. . . .

A good example is J. S. McCulloh, president of the New York Telephone Company, who runs a series of meetings for prominent users of the telephone to discover their complaints and rectify them. He believes in keeping his ear close to the ground. In like manner, H. J. Taylor, vice president of the Jewel Tea Company, Inc., does not feel that his company is so big that he doesn't need first-hand information.

Last fall he spent nineteen days in nineteen cities throughout the Southwest, riding on nineteen different trucks, and talked to over 500 of the company's customers. . . .

No company can ever afford to grow so big that it neglects to find out just what its customers are buying and the motives which influence them. The tendency of some great mergers to neglect this obvious fact will always remain the small manufacturer's great opportunity. . . . The executive who is too dignified to ride a truck or make a call on a consumer is not a good representative of the stockholders of his company.





## TIME—THAT TOUGH OLD TESTER . . .

Meet Time, that tough old tester of everything in this world. To his aid, Time calls all the destructive forces of the universe. Years come and go, storms and sunshine, heat and cold make their accustomed rounds, while Time, the tough old tester, broods over the world, trying, testing, destroying.

Yet Time, the tough old tester, does have his troubles. Against one material devised by man, Time and his serving-men falter. That material is genuine Puddled Wrought Iron—the metal of which Reading 5-Point Pipe is made. Watch for the next coming of Time, the tough old tester—you can learn about pipe from him.

READING IRON COMPANY, Reading, Pennsylvania

For Your Protection,  
This Indented Spiral  
Forever Marks



GENUINE PUDDLED WROUGHT IRON  
**READING PIPE**  
DIAMETERS RANGING FROM 1/2 TO 20 INCHES



*Science and Invention Have Never Found a Satisfactory Substitute for Genuine Puddled Wrought Iron*



# THIS AMAZING HUMAN TELEPHONE



## GIVES YOU INSTANT CONVERSATIONAL CONTACT WITH EVERY MEMBER OF YOUR ORGANIZATION

**S**TABBING thru space like a flash of light, this remarkable little instrument carries your voice from your office to that of any individual in your organization . . . and brings back an immediate response thru a clear-toned loud speaker . . . Not a moment's delay! . . . Not a second lost in running back and forth . . . Not a person leaves his desk! + + + "Impossible", you say? . . . But it is not impossible! . . . With the DICTOGRAPH System of Interior Telephones you can confer with your associates . . . issue instructions . . . secure information . . . as quickly as the thought comes to you + + + At the mere flick of a key the party you want answers at once! Your DICTOGRAPH loud speaker transmits his voice distinctly without the aid of an ear-piece. You speak quietly towards the instrument and he hears you as well as if he were with you + + + DICTOGRAPH takes the unfair burden of "inside" calls from the switchboard and leaves your telephone free to receive incoming calls. It banishes the handicaps of the old-time buzzer system . . . eliminates the time-wasting confusion of inter-office visiting + + + It will take only a few moments to show a DICTOGRAPH in actual operation in your office and you will be under no obligation whatever. Merely write to the DICTOGRAPH PRODUCTS CORPORATION, 224 West 42nd Street, New York, or to any of our branches and agencies, located in the principal cities. + + + +

### DICTOGRAPH SYSTEM OF INTERIOR TELEPHONES



#### FREE TO BUSINESS EXECUTIVES!

A Copy of ROBERT C. BENCHLEY'S Newest and Funniest Satire on Business: "BUSY IN CONFERENCE." . . . The happenings at a typical business meeting gently lampooned by one of America's keenest satirists . . . Illustrated by Rea Irvin . . . The book will be mailed with our compliments to any executive who will address a request to us on his official stationery.

## Fitting Steel For the Jobs Ahead

(Continued from page 47)

has been a factor limiting production, this metal has opened the door to new opportunities.

Of even greater importance, however, particularly in such older industries as paper making, is the development of the stainless steels.

Until a few years ago most of the stainless metal available in this country was made under English patents and was in reality a stainless iron. The German formulas, first developed by Dr. Benno Strauss of the Krupp Works, were first in the field, but only recently have they come into widespread commercial development here.

### When steel joins the nobility

THE German product is based on the stainless iron formula, but goes far beyond that analysis. It calls for the addition of a certain proportion of nickel, and a processing formula yielding a metal possessing in many respects the characteristics of a noble metal. It is resistant to air, water, dilute solutions and acids at high temperatures and at high pressures. It can be deep drawn, wire drawn, spun, machined and welded. The stainless quality is integral and not merely a surfacing. Therefore wear will not affect it.

In many industries progress in the perfection or improvement of the product and increasing its production has been delayed through lack of metal surfaces suitable for mass production.

A laboratory worker, for example, having at his disposal special and highly expensive equipment, works out a new process involving chemical reactions, only to find that the only way to put it into mass production is to reproduce laboratory equipment on a large scale. But that equipment may have included the use of noble metals in quantities negligible in the laboratory but prohibitive in the plant.

The new stainless steels solve these problems in hundreds of specific instances. Before many years I expect to see certain inaccessible and exposed parts of our skyscrapers made of stainless steels. In fact this material is now specified for the covering of the tower and other exposed metal work on the new Chrysler building in New York.

It is unlikely, in my opinion, that the use of alloys ever will settle down to a few standardized formulas. New dis-



# AT A GLANCE...

the eye picks up the figures of the concentrated, normally-spaced dials of the Marchant. The "operating area" occupies less space than a postcard. Figures grasped easily, quickly, with one-half the eye-travel. Increases speed... helps make the Marchant 25% to 40% faster. And saves eyestrain.

Concentrated dials is only one of five big exclusive improvements of the Marchant that make all other calculators obsolete.

Don't take our word for this. Have these features explained in detail by one of our local representatives

Then try out the Marchant on your own work under your actual office conditions. No tiresome training necessary.

Anyone can operate it after 30 minutes' instruction and practice.

Start now to increase your figuring efficiency, to increase your profits. Phone our representative or mail the postcard.

*Sales and service offices the world over.*

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*Electric, hand-operated and portable models as low as \$125  
16 years building calculators, nothing else.*



*Adds  
Subtracts  
Multiplies  
Divides*

## MARCHANT ALL-ELECTRIC Calculator

**5** exclusive improvements  
that make all other calculators obsolete

**1** Straight-line visible check on all figures. All factors and the result right before your eyes. Increases accuracy and speed. Eliminates checking back. No other calculator has this feature.

**2** Instantaneous electric clearance. Press a button and the machine is cleared of all figures... instantaneously, positively. Speeds up calculations, saves energy, prevents partial clearances from injuring the mechanism. No other calculator has this feature.

**3** Smooth-sliding carriage... no humpy-bumpy hurdling... moves quietly over a straight-line surface... gives greater

speed, less noise, less fatigue to operator, less wear and tear on the machine. No other American-made calculator has this feature.

**4** Automatic stop control on all calculations including addition and subtraction. The electric motor stops automatically the instant the operation is performed, preventing unintentional extra calculations. No other calculator has this feature.

**5** Compactness... Compact keyboard and closely spaced dials make for speed, and machine occupies minimum desk space. No other electric calculator has this feature.

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...there are as many *kinds of*  
**WIRE**



Hard drawn  
high carbon



Hot rolled  
high carbon



Patented  
high carbon



Charcoal iron  
rivet wire



Annealed  
low carbon



Hard drawn  
low carbon

as there are *uses*

**E**ACH must serve its purpose efficiently. All must have absolute uniformity in common.

Years of costly research by the Wickwire Spencer Steel Company has produced the proper formula and method of making each specific kind of wire. But progress has not stopped with this basic knowledge. The finished product is periodically checked for chemical analysis, microscopic structure and physical characteristics. Thus is uniform wire made.

With the use of high-speed machinery the manufacture of all wire goods is dependent upon strict adherence to specified requirements. As one of the largest producers in the world of wire and wire products, the Wickwire Spencer Steel Company reflects its knowledge in its products.

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**Save with Steel**

**WICKWIRE SPENCER  
MAKE UNIFORM**

Wire of all kinds  
Wire Rope  
Wire Reinforcing Fabric  
Clinton Wire Lath  
Wire Screen Cloth  
Wire Poultry Netting  
Chain Link Wire Fence  
Wire Springs & Spirals  
Wire Kitchen Utensils  
Wire Bathroom Fixtures  
Wire Grilles & Cages  
Wire Diamond Mesh  
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Wesco Card Clothing  
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**WICKWIRE SPENCER**  
**W I R E P R O D U C T S**

When writing to WICKWIRE SPENCER STEEL CO. please mention *Nation's Business*

coveries and new applications come too rapidly.

Moreover, the development of research in a wider range of industries and in a growing number of individual plants is leading to a constant increase of specialization. Motor-car makers buy all their steels according to specifications, and it is only a question of time until all other industries follow the same procedure.

Recently the Germans have developed still newer products, among them an alloy known abroad as Widia metal and in this country as Carballoy, and another known as Izett. Neither has been placed on a quantity production basis, but when they are their possibilities for cost cutting in scores of industries are almost beyond imagination. Carballoy is the hardest cutting edge as yet developed, while Izett is an alloy having the faculty of retaining its toughness and structure after being worked. It promises to go a long way toward solving the problems of fatigue in metallurgy.

**Education in new metals**

THE Age of Alloys has brought with it a problem in education which still remains to be solved. Until a few years ago, for example, the railroads used only carbon steels. Railroad blacksmiths and repairmen had been trained through several generations in the treatment of these steels.

After alterations or repairs to a locomotive it was necessary to apply heat to the parts. But a treatment that will bring a carbon steel to its highest perfection will often alter the structure of an alloy steel.

The difficulty exists, not only in the field but in the industry itself. In the present state of development such industrial research organizations as the Krupps in Germany, the General Electric Company and our own research department in this country and others in France and England are so far ahead of the text books used in the most up-to-date technical institutions that a gulf has been created. Men coming out of such institutions who are well equipped to supervise and control planning and specifications based on studies of straight carbon steels and the conventional alloys are to a large extent at sea in the handling of the newer alloys. This, of course, will correct itself in time, but it is one of the reasons why so many industrial organizations have found it expedient to set up their own research departments.





# How many hands will reach for it in 1930?

**T**ODAY, more than ever, the American public expects constant improvement. Often a new product marches past older, well established competitors, simply because it embodies some slight improvement, either in the goods themselves, or in the way they are packaged.

Compare the old-fashioned lemon drops in a pasteboard box with the handy, attractive foil-wrapped package of fruit-drops you see today.

Notice how much more inviting many an old package looks simply because it has been "dressed up" in a transparent wrapper of Cellophane.

Think of the contribution waxed-paper wrapping has made to the merchandizing of

cereals and other food products which must be kept fresh in order to be enjoyed at their best.

## How to improve your package

As makers of the machines which wrap the bulk of America's package goods, we are familiar with modern trends in packaging, and can give expert advice on the packaging of your product. A careful study of your problem may show you not only how your package can be given greater sales appeal, but also how costs can be lowered. Get in touch with our nearest office.

## Package Machinery Company Springfield, Massachusetts

New York  
30 Church St.

Chicago  
111 W. Washington St.

London: Baker Perkins Ltd., Willesden Junction

### Wrapping "difficult" products

Perhaps you feel that your product is "so different" that it cannot be wrapped by machine. Maybe you are right. Maybe you are wrong. Any way, bring your problem to us—solving problems built our business.



# PACKAGE MACHINERY COMPANY

*Over 150 Million Packages per day are wrapped on our Machines*





## He didn't pay a penny for this *method* that frees his bookkeeper for other work!

"THE card ledger is great", writes a Wall Street broker. "It enables us to post and bill in double-quick time. Your representative was right—it saves us time and money."

A METHOD that not only speeds up work—not only does the job accurately—but a method that actually saves you money!

That's what Remington Rand offers you free of charge—when you purchase a card ledger. You pay only a reasonable price for steel trays, crisp, upstanding ledger cards and guides reinforced with metal tips.

You never pay Remington Rand

Business Service for IDEAS—ideas that have been tested in the school of "hard knocks"—ideas that have a cold cash value in *your* business.

A dozen ways to bolster up your balance sheet are yours for the asking. Just call in a Remington Rand specialist. Gladly, quickly and without charge, he will inspect your methods. His expert advice will be impartial, for he represents the largest organization of its kind in the world.

Call for a specialist today—there is a Remington Rand Business Service branch nearby. Or write to the central office at Buffalo, N. Y.



*The Library Bureau Steel Ledger Tray ... a quality tray in every detail ... with quality in its attractive appearance ... quality in its durability ... quality in the way the cards stand stiffly upright for fingering ... quality in the way they are off-set for proving purposes ... and quality in this tray's ability to retain neatness always. Call the nearest Remington Rand branch and ask to see it today.*

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**Remington Rand**  
BUSINESS SERVICE  
BUFFALO, NEW YORK

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SAFE CABINET  
KALAMAZOO

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# Room and Bath—and \$20,000,000

By PAUL MONTGOMERY

- IF YOU live in an average American city you'll find in this tale of Topeka some happenings that quite likely are typical of events in your own home town. Perhaps, too, you'll find a moral that can be called to the attention of your fellow citizens with resultant benefits both to them and to your community



The Sixth Streeters finally opened their hotel a year after the completion of the other



Every one expected the Tenth Streeters' Kansan Hotel to fail when the newer hostelry opened—but a surprise was in store

**N**EARLY every city has had its family rows—wordy wars which have found the business men of one section of the city in heated conflict with business men of another section over the location of a public improvement or some other desirable addition to the city.

Fruits of such quarrels are generally bitter; seldom indeed do they ripen into the results now evident in Topeka, Kans., after just such a struggle.

need for which had long been evident. Hotel conditions in Topeka, the state capital, were perhaps the worst of any city of similar size in the United States. At that time two thirty-year-old hotels were in operation. Between them they offered only 210 rooms and a single dining room to the public—and this in a city of some 60,000 population.

For years the daily papers and the local chamber of commerce had dwelt upon the need for a new hotel, but its promotion always failed as a result of

the inevitable location fights. These fights dated from the day when a chamber of commerce president, in a spirit of misguided optimism, conceived the idea of appointing promotion committees from each of Topeka's two business districts. It was his belief that the two committees would vie with each other in a spirit of friendly rivalry to finance a hotel that would be built in the center of the city.

The two committees did vie, right enough, and most lustily, but each with the determination to locate the proposed hotel in its own end of town. For years the Sixth Street crowd was aligned against the Tenth Street crowd, and



neither was willing to compromise. Add to this situation the cries of the timid souls, who declared that such a venture would never pay anyway with Kansas City only 70 miles away, and it can be imagined what the prospects were for progress.

### Two hotels half built

THE deadlock was finally broken when the Tenth Street crowd raised enough money among their own members to wreck some buildings and dig a hole. They then served notice on the Sixth Street crowd that here was Topeka's hotel already started so "bring your money up here and help finish it."

Not to be bluffed the Sixth Street crowd bought some lots. This move made an up-town swimming hole and skating rink out of the Tenth Street crowd's hole for more than a year. Finally, convinced that a more impressive demonstration was necessary, they shook the pennies out of the baby's bank and enclosed the hole with a foundation wall.

The Sixth Street crowd called the trick in turn by digging themselves a hole also.

At this stage of the game it became apparent that instead of compelling a cooperative adventure negotiations to date had forced the two factions further apart.

Then up jumped one of the daily papers with a stinging front-page editorial

accusing the Sixth Street crowd of stopping the community's progress by making a bluff of building a second hotel simply to stop the construction of the first. This editorial did not help the situation a bit. The next move of the Tenth Street crowd was to enlist outside capital and proceed with a concrete frame.

In the meantime the opposition bought steel and erected a frame. Right here the Tenth Streeters' outside capital failed and it began to look as if the crowd down the street would be the ones to build the town's hotel. But their capital also had been exhausted and outsiders had become wary. Finally, by much effort and sacrifice, the Tenth Street crowd was able to finish and open its hotel first.

To salvage original investments the Sixth Street crowd had no alternative but to make similar efforts and complete its hotel.

It had taken four years to build one hotel and three years to build another and here was Topeka with one nine-story hotel and another ten stories high, where it was originally intended that only one eight-story structure should grow. And while the hotel which opened first enjoyed a most profitable business during its first year, every one expected it to fail when the newer and larger hotel was opened.

Herein lies the miracle. Since the latter opening, a third new hotel has been added and all three have prospered increasingly each year.

The most sanguine citizen hadn't thought such a thing possible. No one had really analyzed the town's latent hotel possibilities. True, it being the state capital, Topeka could always look forward to political conventions and a few industrial ones; true, there were times when the 210 hotel rooms the town afforded forced private families to "take in guests." But it was beyond the bounds of conjecture that the conventions would increase four-fold and that the lack of hotel rooms would again be felt a few years later despite the 800 modern hotel rooms offered.

When the trend of affairs was sensed, the town literally found itself and began to have a "city complex." If new hotels would pay, so would a ten-story office building—so it sprang up only to be paralleled and followed by a million-dollar railway station and the completion of a two-million-dollar Masonic Temple.

Theater owners, catching the drift of affairs, built three new show houses, another railroad built a million-and-a-half-dollar general office building and the game was just started.

### Building boomed in Topeka

THERE was no place now for the timid soul, and even rival hotel factions forgot past animosities and united to build up. The new ten-story office building erected by a home life insurance firm energized three other home companies into building imposing office structures. Six new churches sprang up while eight new city schools were being built and only a few months ago a million dollars worth of high-school bonds were voted.

Washburn, the town's local college, under the guidance of its energetic president, Dr. P. P. Womer, increased the worth of its physical property and endowment more than a million dollars. The city, with its many new homes, has moved its corporate limits one mile farther west.

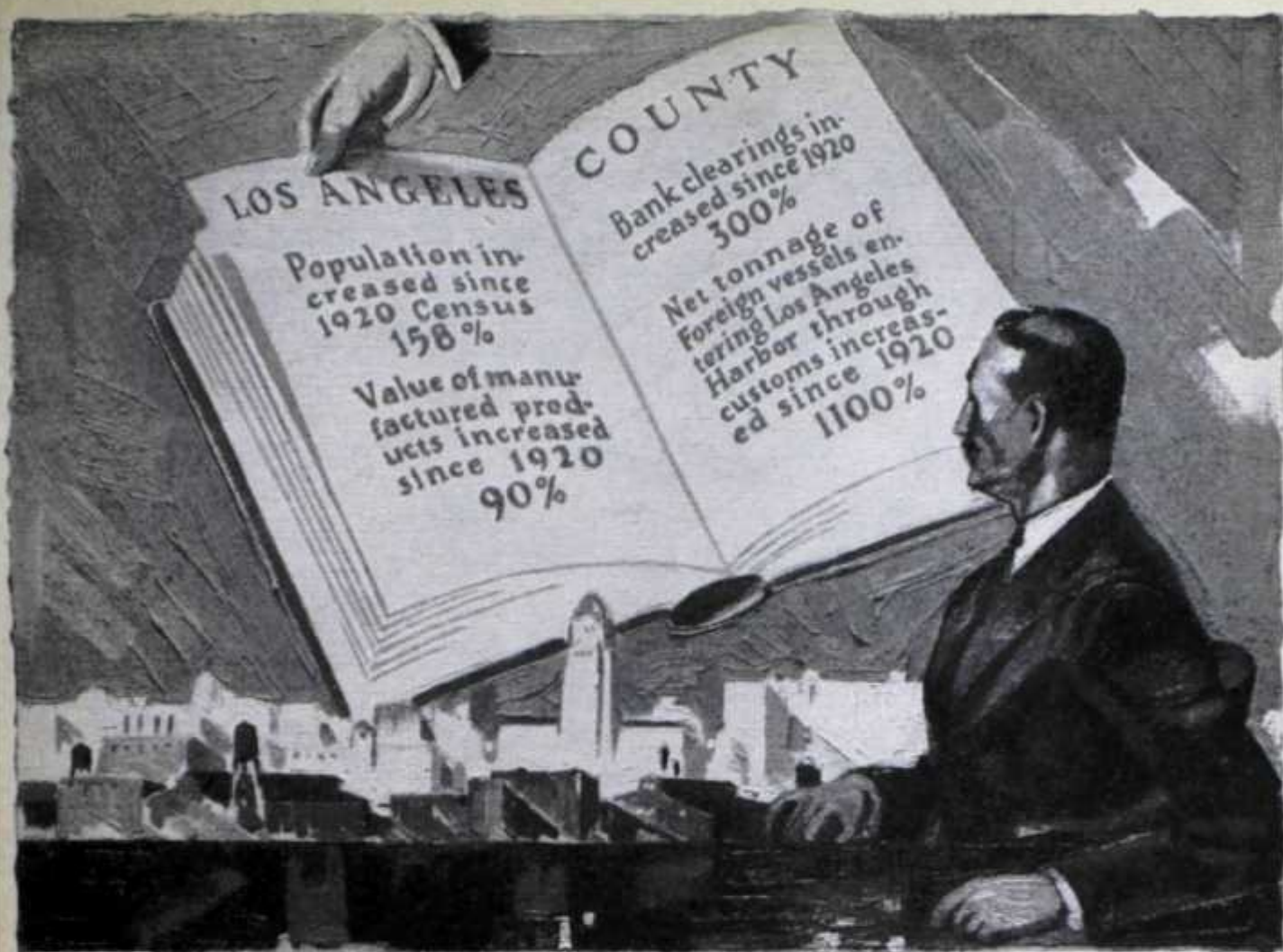
Added up in the city building inspector's records, these improvements total about \$20,000,000 all told in a town of, perhaps, 65,000 population.

All of these things have come about in Topeka despite the fact there has been practically no increase in new industries, no oil struck, or any other economic factors entering the situation. That is there has been none unless this fact be counted—that as the town stood it was literally worn out and needed structural treatment of new steel and concrete. But it took a ten-year hotel fight to bring out this situation and to provide the cure.



Since the opening of the Sixth Street crowd's hotel a third, the Capitol, has been added, and all have prospered—likewise the town





## A RECORD OF DEVELOPMENT UNSURPASSED IN HISTORY

**J**UST so long as Southern California continues to enjoy its delightful year 'round equable climate, and other living advantages; and just so long as human nature remains as it always has been . . . people will continue to flock to Los Angeles County.

It is but necessary to study indices of the past to see that this area must inevitably become one of the greatest consumer markets of the world. Today, it is by far the largest concentrated market on the Pacific Coast. And it is substantially increasing its lead every year.

Industrialists who are entrusted with the destinies of great manufacturing plants and who must consider the economics of production, distribution and markets, are bound to realize the importance and the good business of locating plants in Los Angeles County to serve this great metropolitan area . . . and the whole Pacific Coast . . . and to develop the tremendous virgin export markets of the Far East.

*Inquiries are invited regarding manufacturing and market advantages and opportunities in Los Angeles County. Address: INDUSTRIAL DEPT. LOS ANGELES CHAMBER OF COMMERCE.*

**Industrial**  
Power Rates with load factor discount, as low as  $\frac{3}{4}$ ¢ per K.W. Hour.

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Natural Gas at 20¢ per million B.T.U.'s.  
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Abundant Open Shop Contented Labor

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Low Building Costs and maintenance and high labor efficiency due to mild climate

## Industrial LOS ANGELES COUNTY

*When writing to Los Angeles Chamber of Commerce please mention Nation's Business*





# A Single Fleet of 2221 WHITES hauls over 700 million gallons of gasoline a year


Here, in facts and figures, is the story of an accomplishment without parallel in motor transportation. The story of the largest standardized fleet of trucks in the world. The figures are amazing—the facts challenge comparison.

Back in 1911 the Gulf Refining Company purchased its first White Truck. Careful records were kept on that first White—costs were recorded and performance was checked and rechecked. On strictly unbiased tests of performance new Whites have been added each year, until today there are 2221 White Trucks in this single fleet.

With this great fleet of Whites, Gulf hauls over 700 million gallons of gasoline a year—enough gasoline to supply every automobile in the United States with over 30 gallons each. This tremendous gallonage is hauled at an unprecedented low cost per gallon. Besides gasoline the fleet hauls over 107,000 tons of bulk tonnage in oils and greases. More than 24 million truck miles are rolled up annually—a distance equal to 960 times around the world.

In this fleet there are 416 Whites that have run over 100,000 miles each and many are





covering their daily routes with 12 to 14 years of service to their credit. No higher tribute to the dependability of White Trucks could be found than the fact that Gulf has never discarded a White because it has worn out and has never used any other make of truck since 1911.

The distributing of gasoline and oil by the Gulf Refining Company is on a gigantic scale. Gulf operates in 23 states—serving thousands of stations along the Atlantic seaboard from Maine to Florida and the Gulf Coast as far west as Texas. Such wide-spread operation demands the highest efficiency and economy in hauling. These Whites must keep rolling day in and day out without regard for road or weather.

To accomplish this, supervision of the entire fleet is conducted from headquarters in Pittsburgh. Every item of operating and maintenance cost is accurately recorded, together with the history of each truck, its physical

make-up and its performance. There is no sentiment, no leniency in the tabulations. Each truck is judged on the basis of the cold facts. The fleet is always kept up to the highest point of efficiency both from the standpoint of appearance and operation. Even repainting is a part of scheduled attention.

The same kind of remarkable service that has made the great Gulf fleet of Whites famous is true of all White Trucks throughout the oil industry. More White Trucks are in the service of the oil industry than trucks of any other

make. There is a logical reason for White leadership—a leadership built on the solid foundation of outstanding performance in every field of business, in every kind of transportation service. The fact that 1311 of the country's foremost owners operate 46,511 Whites in fleets of ten or more is convincing evidence that White gives you more for your transportation dollar whether you buy one truck or a fleet.

The economy and efficiency of standardizing on quality transportation is expressed in the statement of Mr. E. H. Grey, General Superintendent of Motor Equipment, Gulf Refining Company:

"White Trucks have made a wonderful record in the service of the Gulf Refining Company. Their stability and durability is shown by the fact that all the Whites in our big fleet are still in service. During the last dozen years a number have been lost in accidents, but our pioneer trucks are still on duty. By standardizing on Whites we have lowered operating costs and increased efficiency and our records show that we do not get an increasing maintenance cost with quality units. Our 10-year-old Whites cost no more to operate than new ones added to the fleet."

THE WHITE COMPANY, CLEVELAND

# WHITE

A COMPLETE LINE OF FOUR AND SIX CYLINDER  
**TRUCKS**  
**BUSSES**



# NEWS OF ORGANIZED BUSINESS

By WILLARD L. HAMMER

## Prizes for Better Building

THE CHAMBER of Commerce of the Borough of Queens, New York, is conducting an annual contest for better buildings, thereby hoping to improve the character of the community.

"To encourage the design and construction of better planned, better constructed, and more attractive buildings," awards are made annually for structures erected during the preceding year which are the most outstanding in design and workmanship. For the contest, buildings are divided into the following types: industrial, business, business and residential, apartment, residential, residence group, and institutional.

The owners of the award-winning buildings will each receive a bronze tablet and a certificate; the architects and the builders each a certificate; and the subcontractors each a letter of commendation.

The awards will be made at the annual dinner on January 22.

## Association Activities

THE National Cottonseed Products Association has published a book entitled "Rules Governing Transaction Between Members." The rules were adopted at the thirty-third annual convention of the Association.

The National Coffee Roasters' Association is issuing a manual for coffee-roaster salesmen and other retail-grocery salesmen on "Best Practices in Retailing Coffee."

The American Institute of Steel Construction mails monthly to each member reproductions of advertisements used during the month. Extra copies of advertisements are available to members on request. They are often used as envelop stuffers by them.

## Joining Art and Industry

THE NEWARK School of Fine and Industrial Art on October 16 held a luncheon conference on the subject of design in relation to industry and commerce. Fifty guests were present, including

leaders in education and industry from Newark, New York and nearby territory.

Ways and means by which the school might serve the industrial and commercial interests of neighboring territory in improving the appearance of packaged articles and their display and advertising were also discussed.

One of the speakers brought out the fact that a survey of any retail store shows surprisingly few articles that have an appearance satisfactory from the standpoint of fine design and color. Business men are becoming increasingly aware of the sales value of an attractive up-to-date looking package for their goods, he said.

The Newark School has arranged to cooperate closely with manufacturers in that district who wish advice or help on packaging and display.

## Ice Industry Sees Good Future

THE EASTERN Ice Association, meeting recently at Atlantic City, decided it was in an excellent position

to compete successfully with mechanical refrigerating systems.

Since 1924 ice consumption has increased much faster than the population growth would indicate. The industry is accepting this fact as a reason for being optimistic regarding the future.

An excellent presentation of the ice industry's position was contained in the convention addresses.

## City Planning and Zoning

THE CIVIC Development Department of the National Chamber has just published a Supplement to City Planning and Zoning Accomplishments. This report is designed to give an impartial presentment of facts concerning city planning and zoning. It is an excellent collection of data on the subjects.

## Street Railways

THE MUSKOGON, Mich., Chamber of Commerce has made a most complete report of the street-railway situation with respect to that town, a report in which

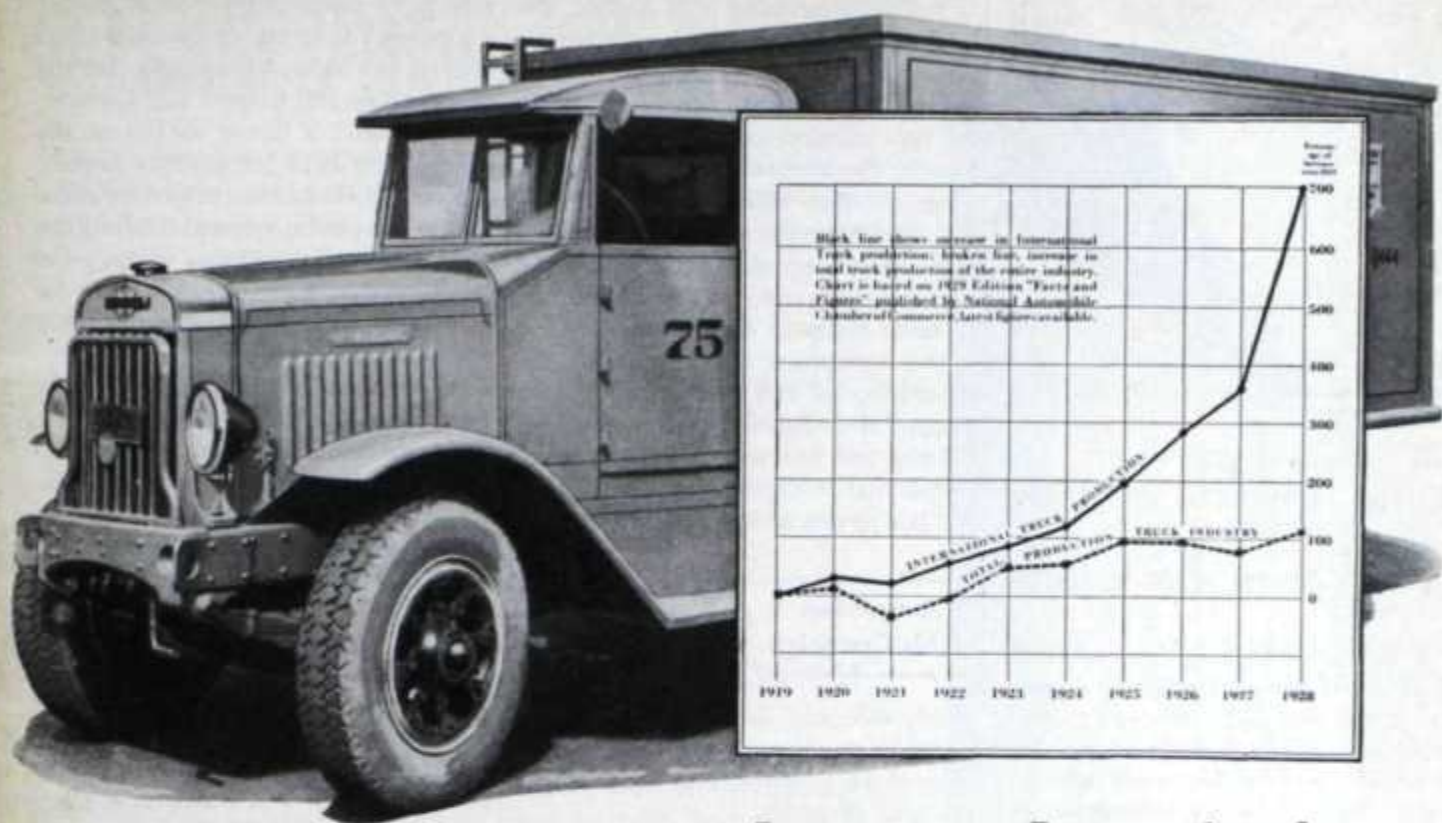
## Where Business Will Meet in January

(From information available December 1)

6	Rubber Manufacturers Association	New York	Hotel Commodore
6-8	Northwest Cannery Association	Seattle	New Washington Hotel
6-9	National Shoe Retailers Association	St. Louis	
8	Eastern Soda Water Bottlers Association	Boston	Elks Hotel
10-12	National Customs Service Association	Detroit	
14	Mining and Metallurgical Society of America	New York	
14-15	National Boot and Shoe Manufacturers Association	New York	
14-16	Better Bedding Alliance of America	Chicago	
15-16	New England Association of Ice Cream Mfrs.	Boston	Copley Plaza Hotel
16	National Jewelers Board of Trade	New York	
16-21	National Slate Association	New York	
20	Silk Dyers Association of America	Paterson, N.J.	
20-22	American Fruit and Vegetable Shippers Assn.	Chicago	Palmer House
20-24	National Food Brokers Association	Chicago	Hotel Stevens
20-24	National Cannery Association	Chicago	Stevens Hotel
21-22	Wholesale Dry Goods Institute	New York	Pennsylvania Hotel
21-22	Northern White Cedar Association	Minneapolis	Hotel Radisson
21-23	Western Retail Implement and Hardware Assn.	Kansas City	
21-24	National Association of Dyers and Cleaners	Dallas	
22-24	United Roofing Contractors Association	Louisville, Ky.	
22-25	Western Fruit Jobbers Association	St. Louis	New Jefferson Hotel
24	Manufacturing Jewelers Board of Trade	Providence, R.I.	
25	Aeronautical Chamber of Commerce of America	New York	
25	American Cranberry Growers Association	Camden, N.J.	
27	National Woolens and Trimmings Association	New York	
28	Northern Pine Manufacturers Association	Minneapolis	
28	Compressed Gas Manufacturers' Association	New York	
28-30	National Sand and Gravel Association	Memphis	Peabody Hotel
28-30	American Wood Preservers' Association	Seattle	Olympic Hotel
29-31	Southwestern Lumbermen's Association	Kansas City	
29-31	National Assn. of Merchant Tailors of America	Chicago	



# Fast-Growing Popularity



*In ten years International Truck production has increased Seven-Fold, while the total truck production of the industry has only doubled.*

Starting in 1919, with a 15-year record of successful truck manufacture, and a production already well up with the leaders, International Truck production has grown seven times as fast as the total output of the industry.

The steadily rising popularity of Internationals can be seen in every form of trucking from New York to Hollywood and on every kind of highway from the pavements of Pensacola to the back-country trails of British Columbia.

Owners of International Trucks representing every type of business, large and small, are firmly convinced that Internationals deliver the very utmost in hauling satisfaction.

This comparison, indicating the growing preference for Internationals, is offered in no vainglorious spirit but simply as a matter of public record.

Please remember, too, that back of International Trucks stands more than a quarter of a century of automotive achievement and 99 years of experience in general engineering and manufacture.

May we add that what Internationals have been doing for others year after year they may rightfully be expected to do for you.

There is an International Truck to meet your particular requirements. We suggest that you ask the nearest International Branch or dealer to show it to you. There is no obligation.

International Trucks include the  $\frac{3}{4}$ -ton Special Delivery; the 1-ton Six-Speed Special; Speed Trucks,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$ , and 2-ton; and Heavy-Duty Trucks to 5-ton. Company-owned branches at 176 points and dealers everywhere have the line on their display floors for convenient inspection. Catalogs on request.

**INTERNATIONAL HARVESTER COMPANY**

606 So. Michigan Ave.

OF AMERICA  
(INCORPORATED)

Chicago, Illinois



# INTERNATIONAL TRUCKS



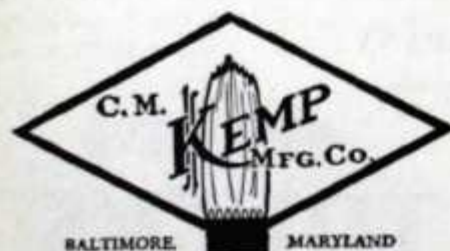


## One Twelfth of 1930 Will Soon Be Gone!

Take your heating equipment for instance, if process heating be a factor in your production. Are you paying, in high production costs, or non-dependable quality for more efficient equipment? If your system is not the Improved Kemp Automatic Gas System it will pay you well to read what the Kemp System has done for others. Investigate it in the light of your own problems. Without obligation a Kemp engineer will gladly go over your equipment with you and make recommendations.

The Kemp System has to its credit an unfailing record of successful installations. Its users tell us enthusiastically of large savings in fuel, of reduced labor and supervision, of better working conditions, improved quality, greater uniformity, reduced rejects and unique methods of heat treating certain exclusive Kemp features make possible. Perhaps the Kemp System can save you its cost the first year.

A catalogue and record of many installations awaits your inquiry. No obligation of course.



When writing please mention Nation's Business

chambers of commerce confronted with similar traction problems may be interested.

A proposal had been made that the municipality acquire and operate the local street railways. The committee investigation and report was precipitated by the announcement that the street railways planned to discontinue service because the unrestricted competition of buses, cut-rate taxis and private cars had rendered street-car revenues inadequate. A counter proposal was that the city take over and operate the lines as a public necessity and convenience.

The committee report opposed the latter proposal and advocated instead a unified, co-ordinated system of street-railway and bus service under private ownership, or as an alternative, a unified bus service under proper regulation.

### Amsterdam Holds Campaign

THE Chamber of Commerce of Amsterdam, N. Y., recently concluded a highly successful campaign, the purpose of which was to increase the membership of the Chamber and to add to its financial resources.

The Chamber had long been handicapped in its major activities by insufficient man power and funds. It had been able to carry on its routine work, through the support of specially interested members, but it was unable to cope with developing conditions which were impeding the city's expansion.

The principal problems facing the city were a labor shortage, traffic, and development of a municipal airport and water filtration plant.

An "Early Bird" breakfast, at which the workers were divided into teams, opened the campaign and memberships and money continued to flow into campaign headquarters for several days after the drive had officially closed. With these added resources the problems facing the city are being vigorously attacked.

### A Chamber Sponsors Art

BELIEVING that the cultural side of a community is linked closely with the industrial and commercial sides, the Chamber of Commerce of Fort Wayne, Ind., appointed a fine arts committee. This committee carried through to a successful conclusion a series of Art Weeks during the last twelve months and is continuing the work this winter.

In the development of these weeks the committee purposed to direct attention to the important relationship exist-

ing between the arts and commerce and to increase art appreciation among business men and women.

The Ft. Wayne Chamber has for several years conducted a "better yards" campaign, designed to arouse active interest in well kept lawns and planting of shrubbery and flowers. The Committee sponsored a flower festival at the close of the 1928 better-yards work.

Next the Committee turned its attention to the plastic arts and held a Plastic Art Week last winter. Seventy-five retail merchants gave window space for a sidewalk art gallery. Each window contained one or more exhibits of paintings, etchings, sculptures and other forms of art.

As one result of Plastic Art Week, a Business Men's Art Club of 34 members was formed. This group meets once a week at the Art School where members follow their individual bents and work at sketching, modeling, and the like, and at the same time learn a better appreciation of the fine arts.

In the early spring, the committee had a Literature Month. A city-wide contest was conducted in which prizes were awarded for the best poem, short story and one-act play. Many manuscripts were submitted. The best one-act play was cast and reproduced as a part of the program.

Later in the spring, a week was selected in which to feature architecture.

The next branch of art to receive attention was photography. A very interesting exhibit was on display during Photographic Week.

Music and the drama and other phases of the subjects favored last winter and spring are being emphasized during the present seasons.

### Oklahoma City Gets new airport

THE Chamber of Commerce of Oklahoma City, Okla., recently decided its airport was too small, considering the air developments of the past few years. It turned the land back to the city, from which the tract had been leased, and submitted to the voters a proposal for a bond issue of \$500,000 to enable the city to get a field of 500 acres with an A 1 A Department of Commerce rating. The bond issue campaign was conducted exclusively by the Chamber of Commerce and it succeeded.

### Nacos Discusses Service Ideas

AT THE recent meeting of the National Association of Commercial Organization Secretaries in Milwaukee, October 20-



# TO DESIGN A MODERN SKYSCRAPER— only a Skilled Architect

Building a modern skyscraper involves more than the laying up of brick or stone according to desired appearance, floor space and height. Designs must be created, plans carefully worked out and specifications accurately calculated to insure due strength and permanence without excessive weight or cost of materials.

Only to a skilled architect can such an important job be entrusted with confidence—his training and experience are absolutely vital.

# To Design the right . . . CONTAINER only a Package Engineer

In the proper designing of a shipping container more must be considered than mere shape and dimensions. Shipping weight, packing room labor costs, storage necessities, merchandising requirements, ample protection without excessive cost—these are all factors to be dealt with.

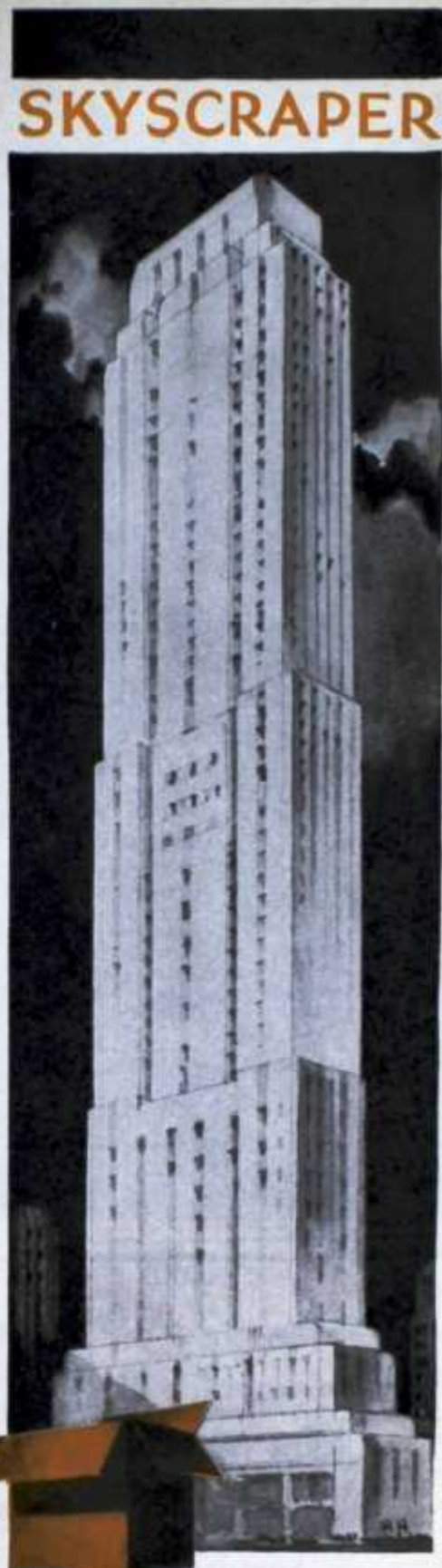
50 H & D Package Engineers are daily solving complex shipping container problems for a widely diversified range of products. Their experience and skill have saved thousands of dollars for shippers everywhere. Their recommendations are scientific, sound and practical.

The services of these men—backed by the resources of the world's largest corrugated fibre box making organization—are available to you without charge or obligation. If you have a packaging problem—send for an H & D Package Engineer.



The coupon below will bring you a copy of the latest H & D booklet on scientific packaging in your industry.

THE  
HINDE & DAUCH PAPER CO.  
304 Decatur Street Sandusky, Ohio



# HINDE & DAUCH *corrugated fibre* SHIPPING BOXES



THE HINDE & DAUCH PAPER CO., 304 Decatur St., Sandusky, Ohio  
Please send a copy of "How to Pack It" to

Name .....

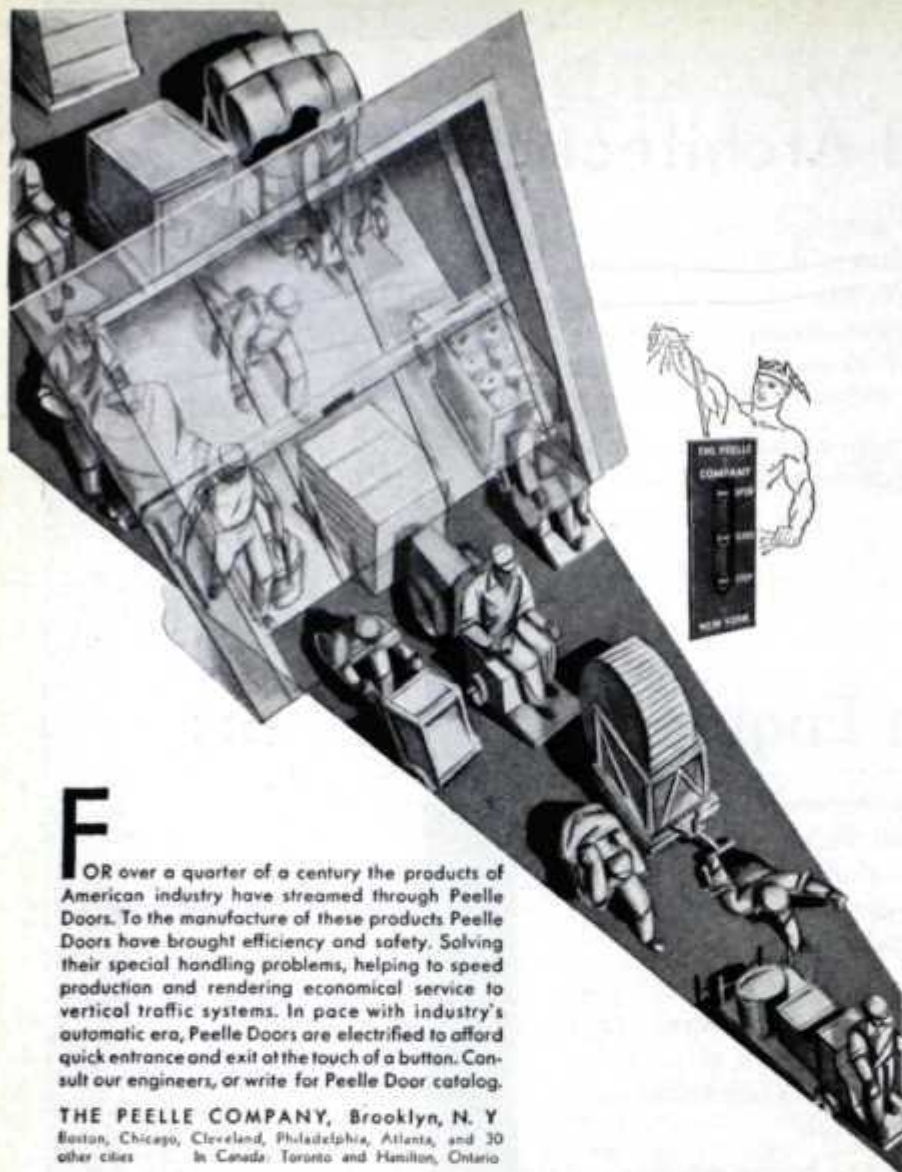
Address .....

Town .....

We are interested in packing .....



## THE DOORWAY OF AMERICA'S FREIGHT ELEVATOR TRAFFIC



**F**OR over a quarter of a century the products of American industry have streamed through Peelle Doors. To the manufacture of these products Peelle Doors have brought efficiency and safety. Solving their special handling problems, helping to speed production and rendering economical service to vertical traffic systems. In pace with industry's automatic era, Peelle Doors are electrified to afford quick entrance and exit at the touch of a button. Consult our engineers, or write for Peelle Door catalog.

THE PELLE COMPANY, Brooklyn, N. Y.  
 Boston, Chicago, Cleveland, Philadelphia, Atlanta, and 30  
 other cities In Canada: Toronto and Hamilton, Ontario

## PEELLE Freight Elevator DOORS

**Mergers!** **Foreign Markets!**  
**Insurance!** **Transportation!**  
**Chain Stores!** **Advertising!**  
**Business Legislation!**  
**Aeronautics!**

THESE are only a few of the important business subjects covered in NATION'S BUSINESS during 1929. An index that makes this material available for quick reference is now being prepared. A copy will be furnished to you on request.

**NATION'S BUSINESS** ★ Washington D. C.

23, "Service Ideas" was the keynote. Definite and specific ideas that could be translated into useful procedure by secretaries were stressed.

The program committee drew largely from outside the secretarial profession in an effort to obtain a view of secretarial activity from the business executive's viewpoint.

Some of the subjects discussed at the group meetings were: Serving local established industries, building and operating the average chamber of commerce, conventions, safety, agriculture, foreign trade, state chambers of commerce, young men's activities, serving the retailer, printing problems. A feature of the consideration of the last subject was the address by Lester Douglas, director of art and typography for NATION'S BUSINESS.

A special feature of this year's meeting was the awarding of \$200 in cash prizes to secretaries submitting the best answers to the question: What is the best, most valuable, most effective, direct service which you have rendered to a member of your organization, or to a group of members, or to the community?

This award was won by T. A. Stevenson, manager of the Chamber of Commerce of Tacoma, Wash. His winning idea told of the acquirement by his town of a line of ships for Oriental trade. The local Chamber engineered the project with no cost to itself.

**Harrisburg's Industrial Survey** THE Harrisburg, Penn., Chamber of Commerce appointed a committee of 100 to make a complete study of the industrial situation in that city. Six subcommittees were formed for the actual study of various phases of industry.

Each subcommittee made a report to an executive committee, which in turn made a consolidated report to the committee of 100. The latter report contained eight major recommendations, advocating:

Establishment of an industrial bureau; assistance in development of new lines for local manufacturers; circularization of classified buyers to inform them of Harrisburg firms which make what they buy; holding of an industrial exposition; stimulation of purchase of Harrisburg products at home; study of the matter of industrial financing; study of markets and raw materials; and co-operation with other chambers in popularization of the work of the Bureau of Topographic and Geological Survey and the value thereof.



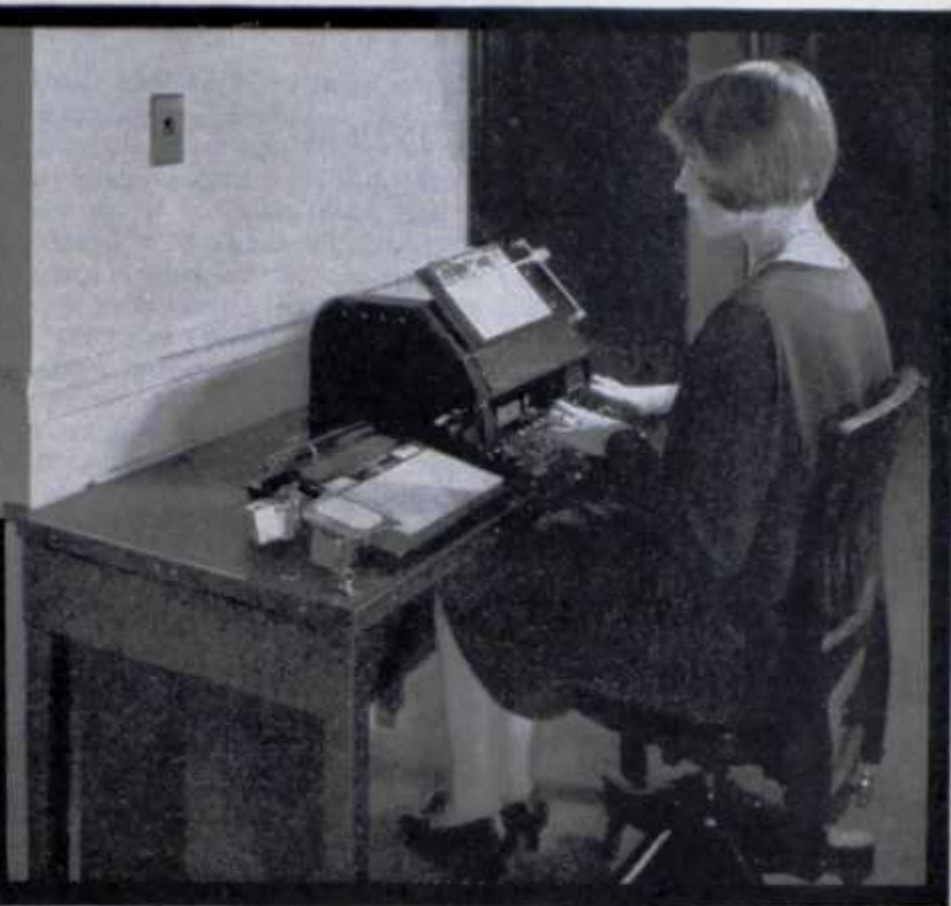
# Postal Telegraph announces THE TYPING TELEGRAPH

in five square feet of space

## AN EXCLUSIVE POSTAL TELEGRAPH FEATURE

**SIMPLE TO OPERATE.** Anyone who can typewrite becomes proficient on this complete Postal Typing Telegraph by instruction given free at installation. Standard typewriter keyboard is used for sending telegrams. Machine is practically noiseless.

**PASTING ON** the incoming message is shown below. The paper ribbon bears the typed message. Notice how closeness of pad to machine and new design of pasteur — exclusive Postal features — speed this operation. New way takes 8 seconds against 50 seconds the old way.



## Handling messages at a speed never before attained

**REMARKABLE** as was the former Typing Telegraph installed in many offices, efficiency is greatly increased by exclusive features now offered by Postal Telegraph. Floor space is more than cut in half. Capacity on incoming telegrams is greatly increased. Fatigue of operator is reduced. This machine is so simple that it can be easily operated by anyone able to use a typewriter.

It types outgoing and incoming telegrams directly to and from the Postal Telegraph central office. Saves on delivery and sending time. Centralizes control

over office telegraphing. The machine uses electric current only when it is receiving or sending telegrams.

This new Typing Telegraph will be installed by Postal Telegraph in any business or professional office where greater efficiency warrants its use.

American business extending nationally and internationally is served by Postal Telegraph at 70,000 points in the United States. At 8,000 points in Canada through connection with the Canadian Pacific Railway Telegraph. In Europe, Asia, the Orient over Commercial Cables. In the

West Indies, Central and South America over All America Cables. To ships at sea over Mackay Radio.

Thus, through the new model Postal Typing Telegraph any office can send or receive telegrams, cablegrams, radiograms of the International System to or from the markets of the whole world.

For complete information on the Postal Typing Telegraph, inquire at your local Postal Telegraph office or the Postal Telegraph Headquarters in the International Telephone and Telegraph Building, 67 Broad Street, New York City.

# Postal Telegraph

Commercial  
Cables

All America  
Cables

Mackay  
Radio



When writing to POSTAL TELEGRAPH-CABLE COMPANY please mention Nation's Business



# THE PATTERN OF COMMERCE



AS SEEN BY

Raymond Willoughby



**T**HOUGHTS on the installation of radio in motor cars raise many questions. For one thing, the practice seems to strike the ultramodern note in motor car equipment. For another, it means the end of the splendid isolation once so happily promised by the automobile. With Dodge Brothers and General Motors preparing to set traffic by the



ears, folk along the highways will be hard pressed to know sound from fury. And who would heed the call for gas or oil at the village store

While words of learned length and  
thundering sound  
Amaz'd the gazing rustics rang'd  
around . . . ?

At any rate, there seems no popular reason for saying, as has been said, that radio is being put in automobiles so that owners can have all their creditors with them.

WHAT cities do with their wastes is told in part by the Detroit Bureau for Governmental Research. A great by-product of city life, as the Bureau explains, is the waste from kitchen, attic, and basement that finds its way into the alleys—food products, ashes, lawn and hedge clippings, paper, furniture, clothing, books, bottles, boxes, and what not.

In Detroit the garbage annually amounts to 170,000 tons, and the ashes and rubbish would make a pile of 2,000,000 cubic yards. For the current fiscal year the cost of collecting and disposing of garbage will be \$1,500,000, and of ashes and rubbish, \$2,500,000. What to do with that waste after col-

lection is a civic problem. Detroit has been experimenting with salvaging in a small and crude way. Some other cities are salvaging rubbish on a large scale, mostly by private contract as in Pittsburgh. In Washington the net profit over the expense of operating the municipal salvage plant is reported as from \$10,000 to \$20,000 a year, plus an indeterminate amount saved in hauling charges. Baltimore is salvaging its rubbish in addition to operating its garbage incinerators. The cost of disposing of a ton of rubbish in Baltimore is \$1.17—about one third the cost in Detroit. Brooklyn is completing three five-hundred-ton incinerators.

It is commonly observed that the American people are much too well-to-do to take continual thought of conservation in the home. Yet it is just as apparent that cities are increasingly concerned to salvage their wastes. The paradox in that fact is plain enough, for it argues that the public is more than ever alive to the benefits of thrift.

WHILE trade has been devotedly following the flag and the films, it is becoming clearer that the retailer is trying to keep up with the customer. Dealers are learning to their cost that they must be better selectors of merchandise from the products offered by manufacturers. They are realizing that they cannot buy what the manufacturer wants to sell simply because the manufacturer made it and hopes or thinks it will sell.

There is plenty of evidence to show that harmony of designs and colors is an increasingly important watchword in making women decide to buy. A whim, perhaps, but an iron whim. This ensemble idea comprehends ready-to-wear apparel and its accessories, period furniture, home decorations, kitchen utensils and bathroom fittings.

The consequences of inharmonious

production has interested Peter V. Bouterse, chairman of the merchandise managers group of the National Retail Dry Goods Association. He finds that it is difficult at this time to color match sheets, pillow cases, bed blankets and bed spreads. The consumer would like to buy these articles in the same shade, he believes. A similar situation is encountered with regard to many other items. For remedy he advocates correlation of production and distribution. This correlation he designates "ensemble production"—a near relative of "companionate prosperity" if there is anything in a name.

JUST what is a semimillionaire? In that dubious category 29,770 persons are included by a New York firm that makes a business of preparing and selling classified lists of "prospects." Of the total number 6,849 are reported to be living in New York. This classifica-



tion seems to define a sort of twilight zone of financial independence. Multimillionaires, millionaires, semimillionaires. The downward progression is significant of something, but of what?

"Multi." Now, there's a pictorial prefix, and one a bit exclusive, too. The list discloses only 2,283 of them in the whole country. Millions piled on millions. Big money. Slathers of coupons. Scads of dividends. And "millionaires." The total is given at about 20,000—a figure that makes them seem almost as commonplace as second lieutenants in the late misunderstanding.

But "semi." That ranking confers no more distinction than the unidentified items crowded into the "miscellaneous"

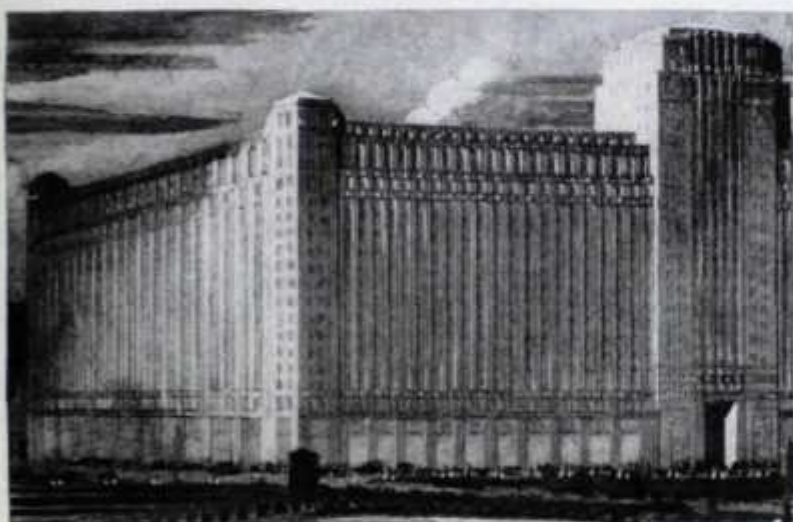


# Where the Allied Forces of Industry Will Inaugurate a New Era of Prosperity

Sales programs, budgets and itineraries are being re-aligned over the desks of makers and wholesale sellers of general merchandise throughout America. The cards of progressive business are being re-dealt to meet the new conditions of the New Era in wholesale selling — that era dating from the inception of The Merchandise Mart.

Costly travel and trunk expense is being penciled out of the picture. Scattered sales offices will be unnecessary when selling is done at the central point to which buyers will flock from the four quarters of the continent.

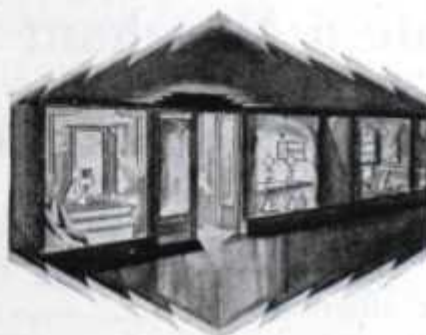
The Allied Forces of Industry will inaugurate the New Era of prosperity at Chicago — in the 4,000,000-square-foot wholesale city under one roof, early in 1930. It will be a prosperity selflessly sought and accepted; for it will benefit in like measure the nation's merchant buyers. To them THE MERCHANDISE MART will mean a panacea for costly, time-consuming trips to several markets. It will let them come often to the Great Central Market, to spend less time buying and have more time for selling at the store. To join in the benefits of the most important mercantile movement in history, request information on sales, display and flexible storage space. Some choice locations remain available. Address,



## THE MERCHANDISE MART

215 WEST WACKER DRIVE, CHICAGO, ILL.

*Brightly-lighted, spacious sales and display rooms bordering 650-foot-long corridors on floors containing 200,000 square feet of space will provide permanent exhibits and business offices for entire industries. Department buyers will invariably do all their buying on one floor.*



*When writing to THE MERCHANDISE MART please mention Nation's Business*



## LEANING on the LEVER

The old Lifting principle as applied  
by Modern Management

The most interesting fact about Modern Management is that its logic is as old and as so as the hills.

With Archimedes, 2000 years ago, it says, today, "Give me a place to stand, and the right levers, and I will move the world."

With vision, based on dependable facts and figures, Modern Management makes for itself the "place to stand." And it *leans on its levers*. With sound Organization, Research, Budget Control, System, Order, it lifts with ease and precision its ever-increasing load of greater and greater accomplishment.

To assist Management in the right selection of these most effective tools of business is the service of Modern Accountancy. It contributes the resources of specialized knowledge and experience to developing the lifting, saving, economic practice of "*leaning on the lever*."

## ERNST & ERNST

ACCOUNTANTS AND AUDITORS  
SYSTEM SERVICE

NEW YORK	WASHINGTON	CLEVELAND	ST. LOUIS	NEW ORLEANS
PHILADELPHIA	PITTSBURGH	AKRON	KANSAS CITY	JACKSON
BOSTON	WHEELING	CANTON	OMAHA	DALLAS
PORTLAND	ERIE	COLUMBUS	CHICAGO	FORT WORTH
PROVIDENCE	CINCINNATI	YOUNGSTOWN	MILWAUKEE	HOUSTON
BALTIMORE	DAYTON	TOLEDO	MINNEAPOLIS	SAN ANTONIO
RICHMOND	LOUISVILLE	ATLANTA	ST. PAUL	WACO
WINSTON-SALEM	HUNTINGTON	MIAMI	INDIANAPOLIS	SAN FRANCISCO
BUFFALO	DETROIT	TAMPA	FORT WAYNE	LOS ANGELES
ROCHESTER	GRAND RAPIDS	BIRMINGHAM	DAVENPORT	SEATTLE
	KALAMAZOO	MEMPHIS	DENVER	

or "all other" catch all of a statistical table. It writes a man down as only a half-portion millionaire.

MECHANIZED as our age may seem, the construction of houses is still a "hand" business. This situation has troubled the National Association of Real Estate Boards. Herbert Nelson, the Association's secretary, does not anticipate any remedy in the near future from any developments in the house-building field now apparent.

It is Mr. Nelson's observation that

houses are still being built in substantially the same way as they were two or more generations ago.

House building is . . . the one national industry which has not yet had the benefits of the application of modern engineering technique.

As he takes pains to point out,

Building materials are still manufactured in sizes which can conveniently be held in a man's hand.

The technique of house building, therefore, is determined by a factor which has been changed in every other process of manufacturing.

And the result is that

while a manufacturer of building material may have been able to cut his costs through technical advance, the labor costs



of assembling building materials on the job in the form of a house have increased so much and more rapidly that the total cost today is twice what it was a few years ago.

With regard to the organization of the building industry he says that

it is organized today as though the manufacturers of automobile parts proceeded to advertise and sell their commodities separately, leaving it to the local garage man to assemble any kind of car he could by combining the necessary parts bought in the open market. You can imagine the kind of car that would be produced by such work.

As for value received, he writes

since 1910 the cost of a house has been doubled while the cost of an automobile has been cut in two. The automobile you can buy today for one half the 1910 price is a better one. I doubt whether the house you buy today at twice the 1910 price is a great deal better in its construction.

## Can the United States Operate a Merchant Marine?

IN A RECENT ARTICLE *Wm. McFee*, noted sea-story writer, said no. In the February *Nation's Business* *Herbert Corey* answers in the affirmative.



## Low operating cost . . . the keynote of Ferguson engineering

**I**n one department of this great chemical plant, Ferguson Engineers made a \$250,000 installation at a saving of \$50,000 in first cost . . . and this new type of equipment will save the owner \$100,000 every year the plant operates.

Your business may not require a plant as complicated as this. But certainly, when you are in the midst of an expansion program, it is reassuring to know that you have at your command an organization capable of working out every detail of your program, finishing it on time and at reasonable cost.



*If you are interested in building and building problems, the Ferguson "Cross Section" — published monthly, should be of real value to you. Each issue contains a technical article dealing with some interesting phase of construction work. A request on your letterhead will bring this publication to you gratis.*

**THE H. K. FERGUSON COMPANY**

Hanna Building • Phone CHerry 5870 • Cleveland, Ohio

# Ferguson

ENGINEERS

*When writing to the H. K. Ferguson Co. please mention Nation's Business*



# LIFE-TIME SERVICE *Guaranteed*



**F**LEXI-POST mechanism is guaranteed to serve you faultlessly for life. A bond protects you against its failure from any cause whatsoever. So every Flexi-Post advantage is a permanent advantage, and first cost almost vanishes when divided by the unlimited years of Flexi-Post utility.

There could be no stronger proof of outstanding excellence of design and construction than this sweeping Guaranty now attached to every Flexi-Post Binder—a binder that affords easier operation and wider utility because of its unlimited capacity, non-protruding posts, two inches of working space, and direct screw compression.

*Apply to your local dealer. Mail coupon to us.*

**STATIONERS LOOSE LEAF COMPANY**  
MILWAUKEE, WISCONSIN

THE POSTS  
PULL DOWN  
FLUSH WITH  
THE COVER



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**The Guaranteed Binder — a Unit of the FAULTLESS Line**

Mail the Coupon—for  
free copy of Flexi-Post  
Booklet that explains  
all features.

STATIONERS LOOSE LEAF COMPANY  
Department A-1, Milwaukee, Wis.  
Send free copy of Flexi-Post booklet.  
Name \_\_\_\_\_  
Address \_\_\_\_\_



# An Economic Picture In Figures

By PAUL W. STEWART

Business Specialist, United States Department of Commerce

**W**ELL—another of those Government publications. What of it? Merely a bulky book of 535 pages covered with figures—something to be more or less respectfully admired as representing a huge amount of labor and time, and then shoved to one side of your desk, eventually to find its way to a shelf—or the waste basket?

What interest can a tome of this kind have for you as a practical business man? What is it for? Can you use it? The Department of Commerce has just issued the Market Data Handbook of United States, an encyclopedia of statistical information. The Government has a substantial investment in this book; and whether the returns on this investment, in which you as a taxpayer share, will justify the expenditure depends obviously on the extent of its usability.

## Competition forces study

THE introduction to the Market Data Handbook states its fundamental purpose as follows:

"The demand for statistical information upon which to base economical marketing or sales operations has been increasing rapidly with the keener competition and the consequent narrowing of profit margins. It is recognized that market analysis offers one of the tools for making distribution more efficient, thereby cutting costs. Market statistics have undoubtedly formed the foundation for sound judgment in planning operations, but the task has been made difficult and costly in the past because much time had to be expended in collecting the data from a number of sources and filling in gaps as could best be done. This Handbook has been designed not only to gather into one source the data available only in widely scattered places, but also to include extensive data not previously available."

Practically every business man will find something somewhere in the Handbook which is of specific value to him, provided, of course, that his business

operations extend over one or more counties. The broad scope of the material makes it of value and interest to anyone who has products or services to sell—to manufacturers, merchants, advertising agencies, publishers, public utilities, investment bankers, trade promotion organizations.

To get down to cases—suppose you are a business man sitting in your office in Philadelphia. Your sales representative is at work in Keokuk County, Iowa. You want to know what you may normally expect in sales in that county for 1930; you want to be assured that sales operations are adapted to local conditions; is the basis of income in the county agricultural, subject to fluctuations in the production and price of corn; or is it dependent on manufacturing, and if so, what particular industries must be watched in order to anticipate fluctuation in earnings in the county? What is the standard of living of the people of that county, as indicated by the number who own automobiles, the number who have telephones in their homes, the number of homes that are served by electricity, the number of newspapers and magazines that are read?

## There's data for every one

IT IS not assumed that all business men would have to consider all these factors; for instance, if you distribute automobile lubricants you would be specifically interested in the total number of automobiles registered in the county, which in itself would be indicative of the total number of potential purchasers of your product in Keokuk county. If you manufacture electric radio sets, on the other hand, you would do well to consider more than one of these factors in planning your campaign in a given area; first, to be sure, you would want to know the number of electrically wired homes; but radios are in the luxury class, therefore you would naturally look for your most likely prospects in areas where the homes are well above the subsistence level, as in-

dicated by the filing of an income tax return, the ownership of automobiles, subscriptions to newspapers and magazines and telephones, and so forth.

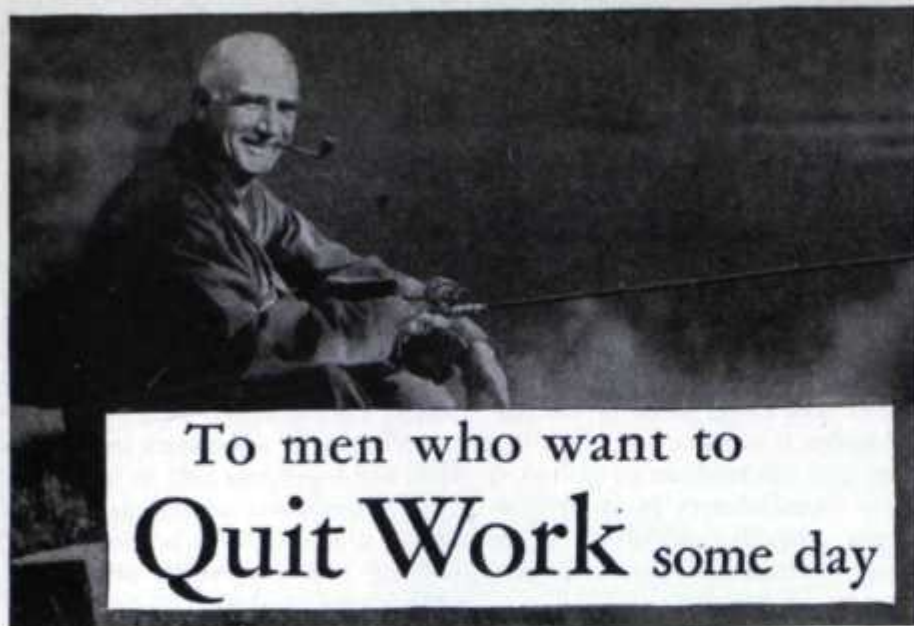
The county was selected as the statistical unit because it is the smallest political unit for which satisfactory statistics are available. Sales operations in the past have been planned and conducted largely on the basis of the state; but trade does not flow according to state boundaries, nor, it is true, strictly within county boundaries; trade territories do, however, conform much more nearly to county than to state lines, for the obvious reason that the county units are much more flexible because there are so many more of them. Then too, many states have a number of trade territories, or communities of interest, within their confines.

## The city isn't a trade unit

THE city, on the other hand, is too limited, because frequently the political limits of a city are not the actual limits. For example, according to the census only the production of establishments located within the political limits of a given city is included in the manufacturing production of that city; while in many cases very large factories are located just outside the city, and the employees live and spend their money within the city. The use of the county as the basic unit for any statistical statement makes it possible to include all of the items of income, wealth, etc., which must be taken into account in an adequate evaluation of a given territory.

The Market Data Handbook has been designed to furnish concrete statistical facts in convenient, quickly accessible form so that a specific item of information—such as the number of industrial establishments of a particular kind, or the annual cash income on farms, in any given county—can be located at a glance. Three different kinds of markets are covered in the tables—the general consumer, the farm, and the industrial market—and an allied tabulation of the number of manufacturing plants, ac-





## To men who want to Quit Work some day

**T**HIS PAGE is addressed to those thousands of earnest, hard-working men who want to take things easier some day.

It tells how these men, by following a simple, definite plan, can provide for themselves in later years a *guaranteed income they cannot outlive.*

### How the Plan Works

It doesn't matter whether your present income is large or merely average. It doesn't matter whether you are making fifty dollars a week or five hundred. If you follow this plan you will some day have an income upon which to retire.

The plan calls for the deposit of only a few dollars each month—the exact amount depending on your age. The minute you make your first deposit, your biggest money worries begin to disappear. Even if you should become totally and permanently disabled, you would not need to worry. Your payments would be made by us out of a special fund provided for that purpose.

And not only that. We would mail you a check every month during the entire time of your dis-

ability, even if that disability should continue for many, many years—the remainder of your natural life.

### Get this free book

The Phoenix Mutual Company, which offers you this opportunity, is a 125 million dollar company. For over three-quarters of a century it has been helping thousands of men and women to end money worries.

But you're not interested in us. You are interested in what we can do for *you*. An illustrated, 36-page book called "How to Get the Things You Want" tells you exactly that. It tells how you can become financially independent—how you can retire on an income—how you can provide money for emergencies—money to leave your home free of debt—money for other needs.

This financial plan is simple, reasonable, and logical. The minute you read about it you will realize why it accomplishes such desirable results—not for failures, not for people who can't make ends meet, but for hard-working, forward-looking people who know what they want and are ready to make definite plans to get it. No obligation. Get your copy of the book now.

### NEW RETIREMENT INCOME PLAN

Here is what a dividend-paying \$10,000 policy will do for you:

#### It guarantees when you are 65

A Monthly Income for life of \$100 which assures a return of at least \$10,000, and perhaps much more, depending upon how long you live, or, if you prefer,  
A Cash Settlement of \$12,000.

#### It guarantees upon death from any natural cause before age 65

A Cash Payment to your beneficiary of \$10,000. Or \$50 a month for at least 24 years and 8 months.  
Total . . . . . \$14,823

#### It guarantees upon death resulting from accident before age 60

A Cash Payment to your beneficiary of \$20,000. Or \$100 a month for at least 24 years and 8 months.  
Total . . . . . \$29,646

#### It guarantees throughout permanent total disability which begins before age 60.

A Monthly Disability Income of \$100 and payment for you of all premiums. Plans for women or for retirement at ages 55 or 60 are also available.

cording to 348 industry classifications; and under each of these are marshalled pertinent data for each one of 3,073 counties—every county in the country.

The "general consumer market" table probably represents the widest field of usefulness. A glance across the 22 columns gives you an economic picture of any one of these 3,073 counties; the population, the number of families, the number of people living in towns and cities of over 2,500, and the rural population; the value added by manufacture and value of factory production in 1927; estimated annual farm sales income over a period of three years—1922 to 1925; value of mineral products for 1927; total volume of bank deposits, with savings deposits shown separately, for 1928; postal receipts, 1927; number of individual income tax returns, 1926; and other data of importance.

One of the unique features of the Handbook is the table on the location of manufacturing industries by counties for 1927, prepared by the Bureau of the Census expressly for the Market Data Handbook. The table covers 190,000 schedules, and nothing of the kind has ever been published before in such detail.

### Maps show how trade flows

IN A pocket inside the back cover of the handbook you will find four maps, from which you can visualize the way trade flows in this country. The maps are of wall size and show county boundaries and names. Upon each of the four maps are plotted the results of an investigation to determine trade areas.

They were all worked up from different points of view, one representing wholesale operations, and two based upon retailing.

The volume may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for \$2.50.

Into the making of the Market Data Handbook have gone liberal contributions from twelve fact-finding agencies—four government bureaus and eight private business organizations. The data, a considerable part of which is here published for the first time, was gathered at great expense and labor to the respective agencies; and every facility was placed at the disposal of the Department of Commerce in the preparation of the book. The growing spirit of cooperation between Government and business is strikingly exemplified in this pooling of resources for the common good of American business.



**PHOENIX MUTUAL  
LIFE INSURANCE COMPANY**

Home Office: Hartford, Conn. First Policy issued 1851

Copyright 1929, P. M. L. I. Co.

PHOENIX MUTUAL LIFE INSURANCE CO., 483 Elm St., Hartford, Conn.

Send me by mail, without obligation, your new book,

"HOW TO GET THE THINGS YOU WANT."

Name \_\_\_\_\_ Date of Birth \_\_\_\_\_

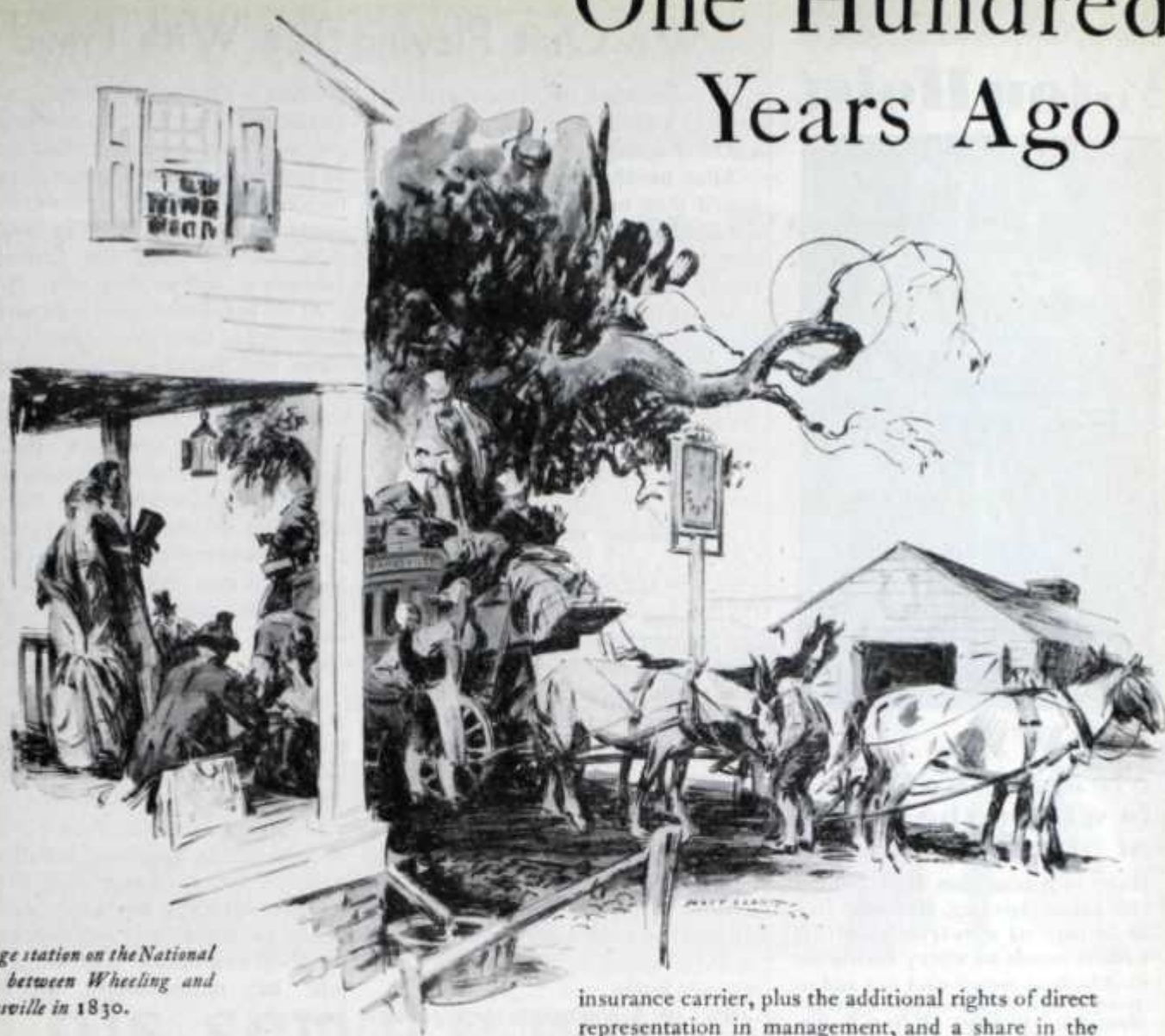
Business Address \_\_\_\_\_

Home Address \_\_\_\_\_

When writing to PHOENIX MUTUAL LIFE INSURANCE CO. please mention Nation's Business



# One Hundred Years Ago



*A stage station on the National Pike between Wheeling and Zanesville in 1830.*

IN 1830 there were twenty-one insurance companies operating on the mutual plan. Today there are over twenty-four hundred mutual insurance companies transacting a business so vast that the figures are staggering. Mutual life companies, for instance, have issued more than ninety million policies protecting their beneficiaries to the extent of sixty-five billion dollars.

The principles that govern mutual insurance have not changed since 1830—nor indeed since 1752 when the first company was founded.

A mutual insurance company was then and is now a corporation owned and operated by its policyholders. A mutual policyholder has all of the rights that accrue to the policyholder in any other form of

insurance carrier, plus the additional rights of direct representation in management, and a share in the prosperity and savings of the corporation.

Most of the leading industrial corporations of the country buy mutual coverage exclusively for casualty risks. The advantages of mutual casualty coverage are equally marked for individual risks.

An informative booklet on Mutual Casualty Insurance will be sent on request. No solicitation will follow. Address Mutual Insurance, Room 2201, 180 North Michigan Avenue, Chicago, Illinois.



MUTUAL PROTECTION IS AVAILABLE  
FOR THESE CASUALTY RISKS:

Accident and Health	Liability (all forms)
Automobile (all forms)	Plate Glass
Burglary and Theft	Property Damage
Workmen's Compensation	Fidelity

## MUTUAL CASUALTY INSURANCE

*These Old Line Legal Reserve Companies Are Members of*

NATIONAL ASSOCIATION OF MUTUAL CASUALTY COMPANIES and AMERICAN MUTUAL ALLIANCE

Allied Mutuals Liability Insurance Co., New York City; American Mutual Liability Insurance Co., Boston, Mass.; Builders Mutual Casualty Co., Madison, Wis.; Central Mutual Casualty Co., Kansas City, Mo.; Employers Mutual Casualty Co., Des Moines, Ia.; Employers Mutual Liability Insurance Co., Wisconsin, Wis.; Exchange Mutual Indemnity Insurance Co., Buffalo, N. Y.; Federal Mutual Liability Insurance Co., Boston, Mass.; Hardware Mutual Casualty Co., Stevens Point, Wis.; Interboro Mutual Indemnity Insurance Co., New York City; Jamestown Mutual Insurance Co., Jamestown, N. Y.; Liberty Mutual Insurance Co., Boston, Mass.; Lumbermen's Mutual Casualty Co., Chicago, Ill.; (American) Lumbermen's Mutual Casualty Co. of Illinois, New York City; Merchants Mutual Casualty Co., Buffalo, N. Y.; Michigan Mutual Liability Co., Detroit, Mich.; Mutual Casualty Insurance Co., New York City; Texas Employers Insurance Association, Dallas, Texas; U. S. Mutual Liability Insurance Co., Quincy, Mass.; Utica Mutual Insurance Co., Utica, N. Y.

*When writing to NATIONAL ASSOCIATION OF MUTUAL CASUALTY COMPANIES please mention Nation's Business*





## 1/4-ton Hoist



## NOW... electric hoisting is within the reach of every business

Here is a machine that brings the labor-saving, time-saving economy of electric hoisting within reach of every business.

Steel-built wherever steel can add to strength and lightness, this LO-HED Hoist does the work of several men faster, better, cheaper.

In factory, warehouse, garage, lifting work on and off of machine tools, on the loading platform, for assembly jobs, in automobile service shops—for the thousands of jobs in every industry where bulky loads must be handled—a LO-HED saves time and money. Its muscles never tire.

And it is priced so reasonably that—Any business that can afford a typewriter or a cash register can afford a 1/4-ton LO-HED Electric Hoist.

For the bigger jobs there are LO-HED HOISTS up to 12 tons capacity. There's a type and size for every lifting requirement.

### AMERICAN ENGINEERING COMPANY



2451 Aramingo Ave., Philadelphia  
Export Office: 50 Church St., N. Y.  
In Canada: Affiliated Engineering  
Companies, Ltd.  
Head Office, Southam Bldg., Montreal

AMERICAN ENGINEERING CO., Philadelphia  
Please send me information about the type of LO-HED  
Hoist checked below:

- ☐ Quarter-ton Hoist.  
☐ Hoists for loads of ..... lbs.  
☐ Electric car-pullers.

Name .....  
Company .....  
Street Address .....  
City ..... State ..... 31-1-30

When writing please mention Nation's Business

## We Quit Playing Tag With Fraud

(Continued from page 40)

were to protect the public against advertising frauds.

After months of study, I was convinced that to cite the publisher and the advertising agency involved in every case would be effective and that the courts would approve such action. I proposed this to the Commission. Some members opposed the plan. The proposition was different from anything we had ever considered; but a majority of the Commission finally voted to issue a complaint on the prima facie evidence in a certain case.

### Publisher readily agreed

PERSONALLY, I was anxious to have the case appealed to the courts. I felt that my position would be sustained. It is a fundamental principle that anyone who aids another in perpetrating a fraud is fully responsible therefor as a principal. But the publisher did not appeal. His attorney promptly came to Washington and informed the Commission that his client would do anything we requested, and that an appeal was the last thing he wanted.

Since then we have not found a publisher nor an agency who was not perfectly willing to abide by the Commission's ruling.

This is a happy but, to me, not unexpected outcome. It plainly shows that the publishing and advertising industries not only desire to eliminate frauds, but are capable of administering their affairs in a highly satisfactory manner when given the necessary authoritative machinery.

With the exception of those who apparently specialize in disseminating fraudulent advertising, the publishers who have attended the board's hearings have expressed a willingness to cooperate in suppressing the schemes complained of. Many of them have thanked the Commission for taking action.

This fine spirit has been the major factor in the success of the proposition. I believe that much of the fraudulent advertising gets into print because the publishers are too busy to read the copy.

The problem of the advertising agencies is similar, and their representatives have shown the same spirit of cooperation. In many instances, agency men have explained that they have put out questionable copy for their clients because other agencies would take the

business if they refused. Now they are protected against this pressure of competition. They know that their refusal to put out obviously fraudulent advertisements can be based on the Commission's decision, and that, in refusing, they are protecting the advertiser's interests as well as their own.

At the board's informal hearings there is nothing to fight about, since the publisher and the agency, and frequently the advertiser also, have common interests in the case. When an advertisement is complained of and the Commission considers it fraudulent, a complaint is issued against the advertiser. The publisher and advertising agency involved are requested to attend the board's hearing of the case and state whether they shall become parties to the cease and desist order which the Commission may issue.

These hearings are closed, and no publicity is given to them. They afford an opportunity for a thorough discussion of the various phases of the cases. The Commission's representative explains the Government's position, the reasons for the complaint, and the decisions of both the Commission and the courts which apply. Every case is placed before the respondents as a problem to be solved in a manner that will not injure, but rather benefit, legitimate business.

### No censorship to come

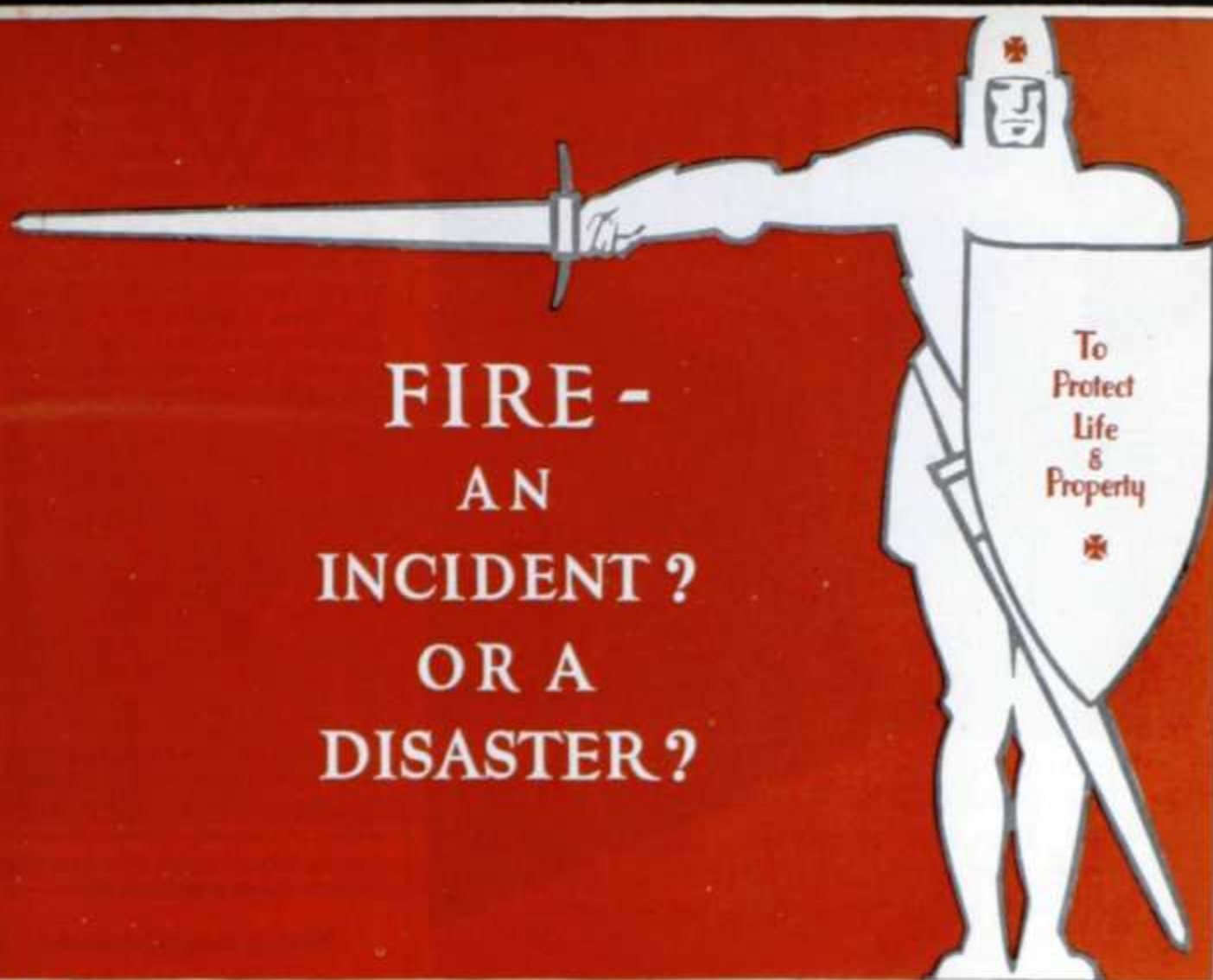
ALL the cases the special board has handled prove the fallacy of the charge that the Commission was attempting to set up a censorship of advertising. Nothing reaches the board except the copy that has been published and on which the Commission has ordered a complaint. The board members discuss with respondents only those statements in the advertising which the Commission alleges to be false and misleading.

This discussion gives the respondents a comprehensive knowledge of the things that cannot be done lawfully, from which they must decide as to what they may do. In other words, the Commission's statement of the negative side of a case, when discussed and understood, is expected to enable the respondents to determine the kind of advertising that may be safely published.

It should be emphasized that all the cases the board has heard have arisen



# FIRE - AN INCIDENT? OR A DISASTER?



## This service will make every FIRE an incident!

Fire's toll from American industry, business, and homes is almost half a billion dollars a year. Wasteful, greedy, destructive... striking unexpectedly... devouring ruthlessly. These are disasters! Yet... there are thousands of fires each year that never reach the newspapers—fires that are killed while they are young. These are *Incidents*! In thousands of cases, Correct Protection against Fire has put a "stoplight" on fire's attack.



The Crusader of American-LaFrance and Foamite represents an engineering service that is protecting over 85,000 of in-

dustries, buildings, homes, against fire... a service that assures Correct Protection. This service is based on four factors.

*First:* a complete study by specialists. Backed by 85 years' experience, they bring to bear a store of specific information on fires and their control.

*Second:* installation of proper and adequate safeguards. As manufacturers of every recognized type of fire fighting equipment, from one-quart hand extinguishers to motor driven fire apparatus, we can be unprejudiced in our recommendations.

*Third:* instruction of your employees

on the proper use of this equipment. *Fourth:* inspection and maintenance service if you so desire, by our engineers to insure constant readiness of equipment.

Whatever the nature of your business the service represented by the Crusader can protect it against fire. American-LaFrance and Foamite Corp., Engineers and Manufacturers, Dept. D61, Elmira, N.Y.

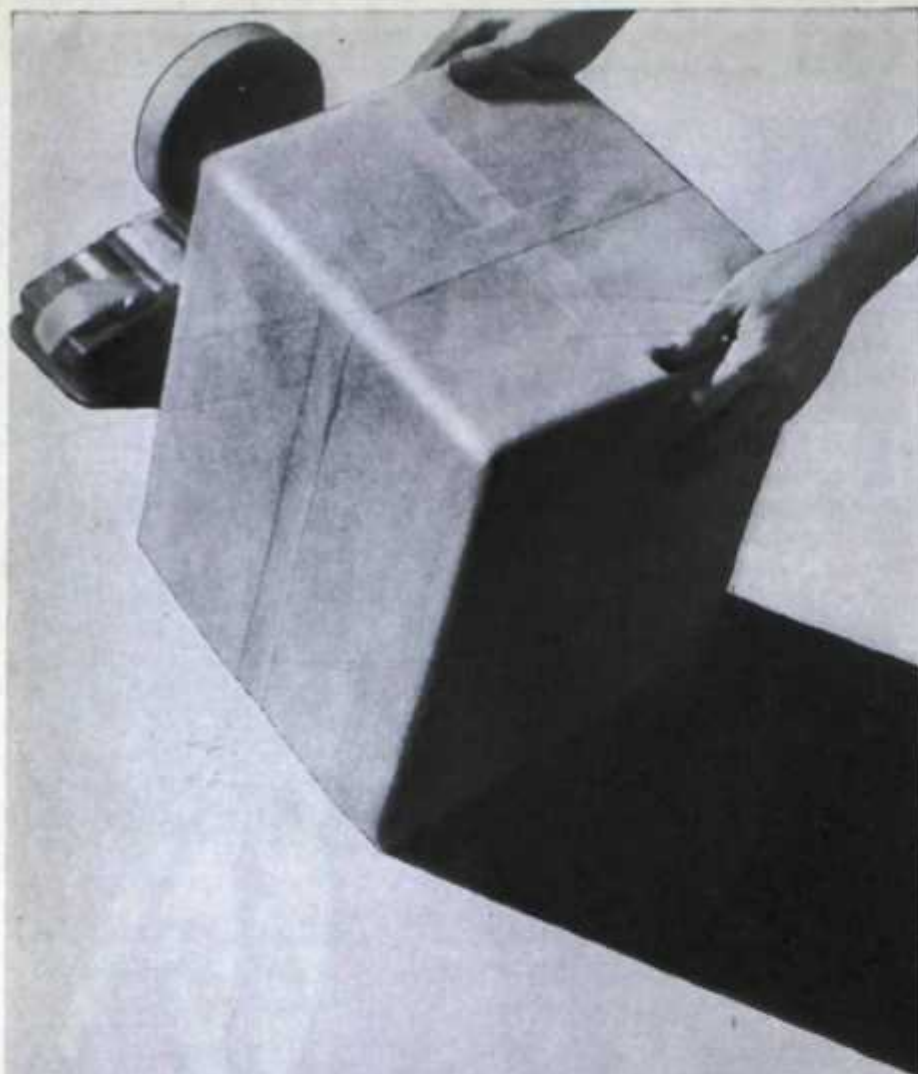


"Correct Protection Against Fire" is a booklet, describing our service and products. A free copy will be sent you on request.



**AMERICAN-LAFRANCE AND FOAMITE PROTECTION**  
A Complete Engineering Service  
For Extinguishing Fires





# PROTECTION!

THE STAMINA of GATOR-HIDE KRAFT is uniformly BUILT IN by the world's largest manufacturers of paper. GATOR-HIDE is strong... durable... TOUGH enough to take up the shocks. Wrap your goods in GATOR-HIDE.



ANOTHER CERTIFIED PRODUCT OF

## INTERNATIONAL PAPER COMPANY

(SOUTHERN DIVISION)

MAIN SALES OFFICE: 100 East 42nd Street, New York, N.Y.

Bastrop Mill, Bastrop, Louisiana } ... MILLS ... { Mobile Mill, Mobile, Alabama  
Louisiana Mill, Bastrop, Louisiana } { Camden Mill, Camden, Arkansas

When writing to INTERNATIONAL PAPER COMPANY please mention Nation's Business

because of the publication of advertisements that were obviously fraudulent. The Commission has received many inquiries regarding its attitude toward exaggerated and questionable claims found in the advertising carried by a great many newspapers and widely circulated popular magazines.

The Commission acts only in advertisements which are obviously misleading and fraudulent. It is not our purpose to split hairs, nor to take exception to expressions of opinion or to decide arguments over technical points in advertisements. We are concerned solely with statements, or rather, misstatements of facts.

In many instances, publishers have not only immediately cooperated in suppressing the advertising complained of, but have adopted stringent rules against the acceptance of all false, misleading and fraudulent copy. Many of these men have later reported to the Commission that they have obtained more than enough honest advertising to take the place of the other, and have increased their profits accordingly.

Likewise, advertisers whose products have merit appear to have benefited by discontinuing false and misleading claims. A number of them have discovered that they can sell more goods through honest representation.

### Work is already successful

AS TO present results, I admit that the Commission has been far more successful in suppressing fraudulent advertising than we hoped. From the cases I have examined and the total number handled, I am confident that the work of the Commission and the special board has saved the public more than 50 million dollars in the last six months, a sum that formerly was lost mainly by the poor, the sick, the credulous and the ignorant.

This accomplishment would have been impossible without the splendid cooperation of the publishers and advertising agencies. The Commission's experience shows that all but an insignificant minority of the members of the industries involved are fair and honest in their policies and practices.

Judging by the result of the last six months—since our plan has been put into full operation—the success of the campaign against fraudulent advertising is certain. How long it will take to stop fraudulent advertising cannot be definitely determined. I believe that within a year 90 per cent of those advertisements that are false and misleading upon their face will be suppressed.



# RUSH ORDERS WAITED WHILE HE IDLED



Telephone Typewriter service eliminates 2-hour delay in sending orders from store to factory 2½ miles away



NO WONDER THE COOK PAINT AND  
VARNISH COMPANY REPLACED HIM  
WITH THIS DEVICE THAT SENDS  
TYPEWRITTEN MESSAGES BY WIRE

## REPRESENTATIVE USERS

American Can Company, Chicago  
Boeing, Universal and N. A. T. air lines  
Ford Motor Company, Detroit  
New York Central, Pennsylvania,  
Southern Pacific and other railroads  
Detroit Edison Company, Detroit  
Stokes Coal Company, New York  
Red River Lumber Company, San Francisco  
Radio Corporation of America, New York  
Roosevelt Hotel, New York  
Bank of Italy, Los Angeles  
American Radiator Company, Chicago  
General Electric Company,  
New York and Chicago  
Brooklyn Union Gas Company, Brooklyn  
Standard Oil Company, Chicago  
Crane Company, Chicago  
Bonbright & Company, New York  
Armour & Company, Chicago  
Consumers Company, Chicago

Nothing is more vexatious, or more likely to lose business, than to have rush orders delayed by dallying messengers. How the Cook Paint and Varnish Company, Kansas City, Missouri, overcame this all-too-common problem is told below.

"Formerly," says the company, "orders were sent by messengers from our main downtown store to our factory. But although the store and factory are less than 2½ miles apart, it was not unusual for a rush order to be delayed 2 hours, sometimes missing that day's delivery.

"Now orders are no longer delayed, thanks to the instant transmission and unquestioned accuracy of Teletype... the Telephone Typewriter. Orders received at the downtown store are Teletyped at once to the factory. Aside from the saving in messengers' wages, we feel that the service pays for itself in the good will resulting from prompt deliveries."

Teletype... the Telephone Typewriter... is the only device that sends typewritten messages by wire. Depressing a

key on the sending machine causes both the sending and receiving machines to print that letter or figure... instantly! As the sender can see what is being printed by the receiving machine, errors in transmission are virtually impossible.

By means of this remarkable device a typist in your office can send typewritten instructions to any part of your plant, or to far-removed branches, warehouses or factories, at the rate of 60 words per minute. Machines can be used in either direction, making it possible to send a message and receive a reply immediately.

A distinct advantage of Teletype is that it provides a typewritten record for filing at both ends. Thus it combines the speed and convenience of the telephone with the authority and permanency of the printed word.

Telephone Typewriter service is not expensive and will pay for itself repeatedly by eliminating errors, doing away with messengers and speeding up the flow of business. Mail the convenient coupon below for further details... today!

# TELETYPE

## THE TELEPHONE TYPEWRITER

## MAIL FOR FURTHER FACTS

For full information concerning the Telephone Typewriter and its cost, sign this coupon, pin it to your letterhead and mail to the TELETYPE CORPORATION, 1400 Wrightwood Ave., Chicago.

Name \_\_\_\_\_

Position \_\_\_\_\_

NR 1-30





## LEADEN FEET HELP THE DIVER

### *Couriers deserve winged heels*

Now Metered Mail for any Business  
...for any Postage



The New Model H  
Price \$75.00

Prints any Postage—Seals as it Prints  
Government Licensed Meter leased  
under service contract.



SINGLE DENOMINATION INDICIA  
A billion and a half letters mailed by  
business leaders of America carried  
this symbol of progress last year.

THE diver's work is slow and deliberate. He needs his leaden feet. But the courier, above all, must be swift. He needs winged heels.

Mail—the modern courier of business—need not, and should not be encumbered with the leaden feet of the old-fashioned adhesive stamp. That is why the Government has made available a new and faster service—Metered Mail. Now business can print, date and record its own postage.

Metered Mail truly has winged heels which lift it out and over the routine of facing, cancelling and postmarking in the Post Office, and carry it straight to the distribution cases during those peak hours of congestion when business winds up its affairs for the day.

Metered Mail also eliminates office delays in mail preparation and despatch, and puts a stop once and for all to loss and theft of postage.

That is why Metered Mail is ever increasingly used by the leaders in modern business... why its imprint is recognized by millions as a symbol of speed and progressiveness... why the adhesive stamp on business mail is destined to become a label of heedless adherence to outworn methods.

# METERED MAIL

the method that made stamps obsolete

The POSTAGE METER COMPANY  
Main Office 836 PACIFIC ST. STAMFORD, CONN.



PITNEY-BOWES MAILING EQUIPMENT  
Offices in TWENTY FIVE CITIES





A clergyman who was a trustee of the college was horribly shocked

# Me and That Saunders Fellow

By THAT JONES FELLOW

ILLUSTRATIONS BY HERB ROTH

- LAST month W. O. Saunders, North Carolina newspaper publisher, drew some comparisons between "Me and That Jones Fellow." He was not altogether complimentary to the staid and complacent multitude that Jones typifies. Here one of that multitude steps out of the silent, methodical, satisfied character in which he and his fellow Joneses are cast to make reply to the Saunderses

I AM that Jones fellow, "a steady, unimpressive chap with an average intelligence who would go unnoticed in a crowd." I am dull, indifferent, wary, cautious, cold. I enjoy no "rare moments of spiritual intoxication when I am lifted up into rapturous joy and peace."

Mr. Saunders wonders if I am happier than he is. I am. And the reason

for my greater happiness is because I am doing a finer, more unselfish job than Mr. Saunders will ever do, for all his energy, his intense enthusiasm, his battles against wrong.

I know these things because I have not always been Jones. Once I was Saunders. In becoming Jones, perhaps I was perverted. Mr. Saunders believes that in a similar case he would be. If

I really was perverted, I am not ashamed. After all, it is no easier to be Jones than to be Saunders.

In the high school I attended, students were not allowed to dance. I allied myself with a group that insisted on dancing. We danced. In college, I was one of the first student editors to lay about me, defying authority, tradition, and the foolish rules with which colleges seek to cloak evils that would not be recognized as evils unless the fingers of the supersaintly were pointed at them.

I was Saunders, crusading with a shining shield against the forces of bigotry, intolerance, convention and stupidity. And then I became Jones. I remember how that came about.

Several college girls were appearing



in the chorus of an amateur musical comedy. Their costumes did not include stockings. A clergyman, who was also a trustee of the college, was horribly shocked at this. He insisted, and made his insistence felt, that the girls must wear stockings or get out of the show.

I was inflamed. I wrote a blistering editorial.

### Saunders fight Saunders

I WAS summoned into the presence of the clergyman. At that interview I became Jones. I did not turn craven. I believed he was wrong and told him so. He believed I was damned and told me. It was not a pleasant interview, but as it went along a great truth grew upon me.

I was a young crusader crying out against the fetters which misguided zealots were drawing so tightly that the limbs of freedom would atrophy and decay.

But the clergyman was also a crusader, crying out against the evils with which mankind was sullyng its life and hurling its soul to perdition. I was Saunders—but so, too, was the clergyman.

The battle that was being fought was not a crucial passage between Liberty and Bigotry. It was nothing more than a row between Saunders and Saunders and, though we fought until one of us collapsed in his own gore, done to death by the dying thrust of the other, the great mass of people—the Joneses—for whom we thought we were making this

fight, would go their placid ways wholly unconcerned. Eventually a shortage of silk, a change of climate, the vagaries of fashion, or the gradual increment of intelligence through the years would bring about the change I sought, or else it wouldn't. Either way it didn't matter. We were fighting over an issue which did not exist except in our own eyes.

That is the trouble with the Saunders of today. They go about butting their heads against ugly, soul-imprisoning walls—"walls of ignorance, walls of conventions, walls of superstition, walls of fear, of hatefulness and intolerance"—never realizing that, when a curiously solid skull makes a dent in that wall, another Saunders is on the other side to bolster the break. Sometimes an unusually great Saunders manages to gouge a hole through which a little knowledge and intelligence may trickle and then he dies "warm in the consciousness of having made a good fight," never realizing that some other Saunders is dying satisfied because he built the wall so solidly that only a little knowledge went through.

And the Saunders who punctures the wall does well to die at once with the flush of victory upon him. Because after him will undoubtedly come other Saunders who pervert that bit of knowledge he gave to humanity into a new creed, a new bigotry. Christ was a Saunders—and so were the members of the Inquisition.

Can a man who is honestly trying to add to the happiness of mankind be truly happy knowing that his efforts must always lead to new suffering and new shackles? I don't see how he can. And he certainly can't doubt that that will be the case.

No reform or enlightenment can be set ahead of its place in the universal scheme of progress without war and hatred and unhappiness for the great masses of the people who should, after all, count more than the individual's joy at a puny triumph.

A Saunders must be selfish. He must fight for his beliefs. He must be intolerant, whether he is intolerant of right or wrong.

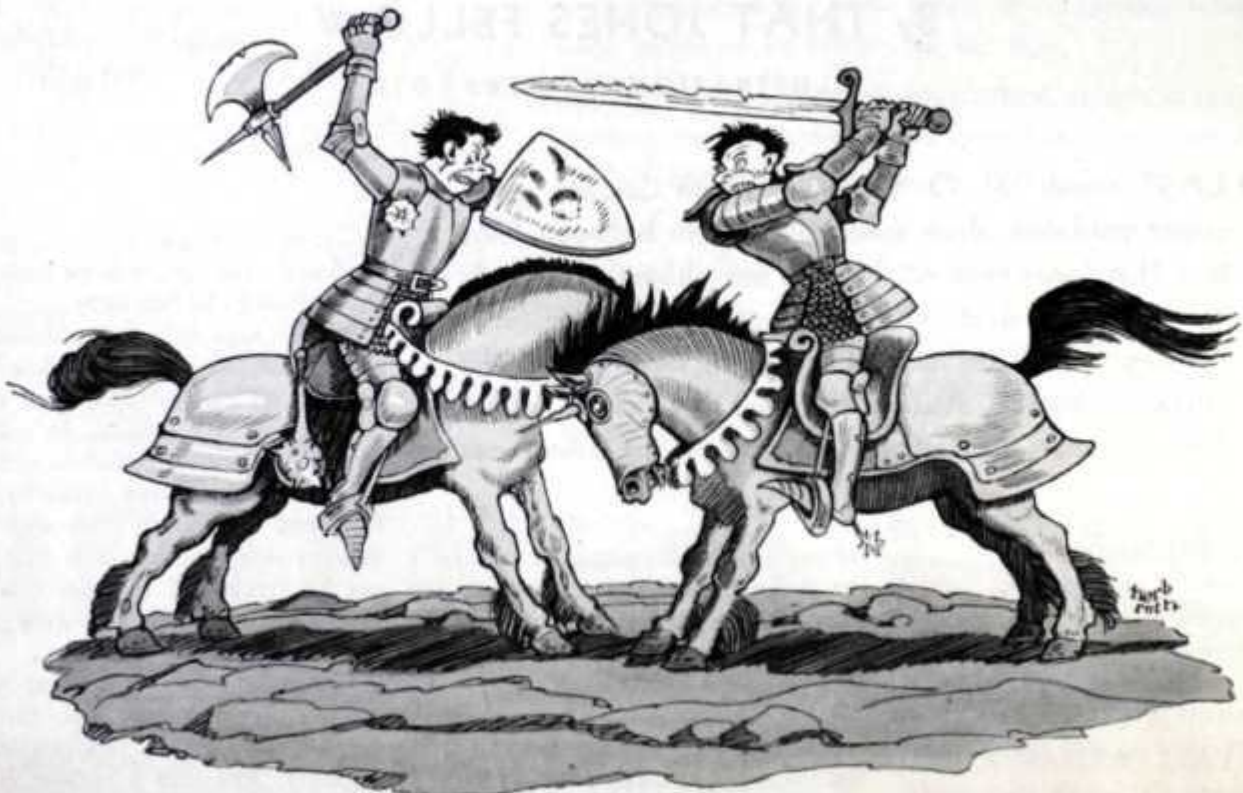
The embattled wets are just as intolerant as the embattled dries. And both are of the Saunders clan.

### Joneses win with patience

MEANWHILE we Joneses sit back and have time to love our families and to give them the things they want. We make a little here and a little there.

We have patience because we have learned that these things over which the Saunders fight will be adjusted in due time, not by the Saunders, but by the ponderous and inevitable might of us Joneses.

We Joneses don't get many thrills, perhaps we don't have much fun—but our children, too, climb on our knees



The battle that was being fought was not a crucial passage between Liberty and Bigotry. It was nothing more than a row between Saunders and Saunders



# Making Accuracy

## ACCURATE



**A**CCURATE workmanship can be accomplished only with accurate measuring instruments. But even the best instruments, when in daily use, lose their precision.

Therefore, all micrometers used in the manufacture of Worthington equipment are turned in at least once each week, and are carefully checked against master gauges of extreme accuracy before they are again released for use.

Instruments and gauges, other than micrometers, used by Worthington machinists are returned to the tool crib each day but are not put back on the racks for redistribution until their accuracy is checked . . . and all new taps and dies are carefully checked for accuracy before they are admitted to Worthington's tool stock.

This is the secret of the close tolerances to which the Worthington shops work . . . the secret of proper fit, of positive interchangeability, of quiet operation, of high operating efficiency, of long life.

Accuracy as defined for ordinary machine shop practice is not good enough here . . . for Worthington products, accuracy must be precisely accurate.

### WORTHINGTON

PUMPS  
COMPRESSORS  
CONDENSERS  
and Auxiliaries  
DIESEL ENGINES  
GAS ENGINES  
FEEDWATER HEATERS  
WATER, OIL and  
GASOLINE METERS

*Literature on Request*

### WORTHINGTON PUMP AND MACHINERY CORPORATION

Works: Harrison, N. J. Cincinnati, Ohio Buffalo, N. Y. Holyoke, Mass.

Executive Offices: 2 Park Avenue, New York, N. Y.

GENERAL OFFICES: HARRISON, N. J.

District Sales Offices:

ATLANTA CHICAGO DALLAS EL PASO LOS ANGELES PHILADELPHIA ST. PAUL SEATTLE  
BOSTON CINCINNATI DENVER HOUSTON NEW ORLEANS PITTSBURGH RAIL LAKES CITY TULSA  
BUFFALO CLEVELAND DETROIT KANSAS CITY NEW YORK ST. LOUIS SAN FRANCISCO WASHINGTON

Branch Offices or Representatives in Principal Cities of all Foreign Countries

# WORTHINGTON

When writing to WORTHINGTON PUMP & MACHINERY CORPORATION please mention Nation's Business





## A New Mail and Passenger Service to HAVANA-NASSAU LATIN AMERICA

FOR business or vacations, the modern business man must have swift and comfortable modes of travel. A speedy, frequent service linking the United States to 21 Latin American countries is a new development of vast importance to alert corporations or individuals.

Board a luxurious southbound train in your home city. Transferring to Pan American airliner at Miami or Brownsville, Texas, proceed with uninterrupted speed and comfort to your southern destination.

Airmail schedules provide important time saving for business communications to points as far south as Buenos Aires.

Every Pan American pilot and co-pilot must fly a distance equal to  $8\frac{1}{2}$  times around the world before joining the System. This rigid selection partly explains the fact that Pan American airliners flew 2,000,000 scheduled miles in 1929 with 99.7 per cent. adherence to schedule. The airliners, costing from \$50,000 to \$75,000 each, represent the last word in comfort and flying efficiency.

Companies or individuals doing business in Latin America may procure complete schedules and tariffs to and from the countries in which their interests lie by applying to Pan American Airways, Inc.



PAN AMERICAN AIRWAYS, Inc., 122 East 42nd St., New York City

# PAN AMERICAN AIRWAYS

When asking for information regarding PAN AMERICAN AIRWAYS mention Nation's Business

### Through Service with These Famous Trains

Direct connections with  
Pan American Airliners at Miami

#### from NEW YORK—

39 hours to Havana and Nassau  
(direct connections from Boston):  
Havana Special . . . Lv. 6:50 p.m.  
Everglades . . . Lv. 10:20 p.m.  
Florida Special, Lv. 8:35 p.m.

#### from BOSTON—

43 hours to Havana and Nassau:  
Everglades . . . Lv. 4:30 p.m.

#### from CHICAGO—

(44 hours to Havana; 45 to Nassau)  
and principal cities of Michigan and Ohio:  
Dixie Limited . . . Lv. 2:00 p.m.  
Floridan . . . Lv. 2:45 p.m.  
Flamingo . . . Lv. 11:35 a.m.

#### from ST. LOUIS—

40 hours to Havana and Nassau:  
Dixie Limited . . . Lv. 4:22 p.m.  
Floridan . . . Lv. 6:20 p.m.

Connecting at Brownsville for  
Mexico City—Daily

#### from NEW YORK—

65 hours 30 minutes to Mexico City:  
The American—Penn. R. R.  
Crescent Ltd.—Southern Ry.

#### from CHICAGO—

51 hours to Mexico City:  
La Salle . . . Lv. 11:25 a.m.  
Daylight Special . . . Lv. 11:45 a.m.

#### from ST. LOUIS—

44 hours to Mexico City:  
Sunshine Special, Lv. 6:30 p.m.  
Seven Airliners daily from Havana—  
one daily from Nassau—for home-  
bound travelers.

For tickets and information, apply  
to your railroad ticket offices or to  
the principal travel bureaus. To  
avoid disappointment, make  
reservations well in advance.

and tell us we are the best daddies in the world. And when they do, we know that nothing on earth is worth while—to us personally—except just their happiness and we dig in a little harder, a little more grimly, but very quietly, to find that happiness for them. And happiness is the end and aim of life. Not personal happiness, but the happiness of others.

Any Saunders will tell you that he is fighting for the happiness of others. Perhaps he is. But, too often, he is really fighting to make the Joneses enjoy his kind of happiness. He is convinced that his way is the only true way to happiness, though it lead through war, and want and starvation.

There must be better ways than that, though perhaps, after all, we Joneses wouldn't find them. Perhaps we need the Saunders to awaken us to the need for improvements. We Joneses are pretty dumb. But I'm glad I'm a Jones.

## Safeguarding Latin American Loans

(Continued from page 60)

down past the Magdalena's sandbars and rapids from Colombia's fertile interior!

Just what the right kind of loans for the right kind of railways or other projects can do for buyers of daily bread in Colombia, Nicaragua, and various other lands down there, as well as up here amongst us, has been recently demonstrated by the small but aggressive and up-to-the-minute republic of Salvador, three or four steamer days north of Panama.

There, a few years ago, something like 20 millions were borrowed after certain New York bankers had carefully inspected the plans for the capital's main streets and several key roads, including one to the near-by Pacific port of La Libertad.

Before this road was improved it took two men and a team of oxen three days and three nights to transport an average load of only 800 pounds over its length. Today, that same highway, paved with the dollars which you yourself made possible if you hold some of the bonds, permits a load of 5,000 pounds to be carried regularly from wharfside to capital by a fleet of 20 hustling trucks in just one hour and 55 minutes!

That's one side of the story. Here's another. If you do hold one of those bonds, you can feel perfectly safe, because, although these particular bankers





MR. SMITH, Executive



MR. SMITH, Office Boy

## Paid to Think, but ...

... there are too many other things that he must do. Important papers can't be held up for the office boy. Orders must move. So—Mr. Smith delivers them in person. All through the day—and every day—vital time is needlessly, hopelessly, consumed in running errands and conveying papers. Busy executives, well-paid to think, are forced to waste time and energy in leg-work. Hence Mr. Smith, executive, becomes Mr. Smith, office boy.

Lamson Pneumatic Tubes clear away this costly confusion. Quickly—in the twinkling of an eye—messages are whisked to their destination—to the farthest corners of the building and on to other buildings. At express train speed the necessary information comes to your desk. Mail is distributed in a smooth, steady stream—no

waiting for the rounds of an office boy. No disturbing messengers and no intruding details, to interfere with the major job of administration. Time and thought and effort are saved to be expended on things that count—things that register in the year-end tally of profits.

Lamson experts have studied the problem of intra-communication thoroughly. They will be glad to show you why scores of representative business houses are adopting pneumatic tubes to speed their flow of papers and how a Lamson System can serve your interests quickly, quietly, efficiently, economically—and with perhaps a greater degree of privacy. There is a qualified Lamson engineer ready to call and study your requirements—without obligation on your part.



One of the specially-designed pneumatic tube stations used throughout the lately-dedicated offices of the New York Life Insurance Company of New York.

THE LAMSON COMPANY • SYRACUSE, N. Y.  
Offices in Principal Cities

# LAMSON

PNEUMATIC TUBE SYSTEMS

SPEED THE DEPARTMENTAL INTERCHANGE

OF PAPERS, FILES, AND MESSAGES . . .





# Keeping Pace With Industry

Industrial methods have progressed at an amazingly fast pace during the half century that the Broderick & Bascom Rope Co. has been making wire rope.

Immense steam shovels, cranes and hoists of greater and still greater capacities have followed each other with startling rapidity, each subjecting its ropes to greater strains and shocks.

To keep pace with the ever increasing demands made upon wire rope, this company has devoted all its energy and accumulated knowledge. It was not enough to make stronger ropes; but ropes in which flexibility and elasticity were so nicely combined with greater strength, that long life and economy were assured.

The designing of such ropes and the designing and building of machines to make them—even the erection of new factories to house these machines—are accomplishments of which the Broderick & Bascom Rope Co. is justly proud.

The most famous of these ultra modern wire ropes is Yellow Strand, distinguished from all other ropes by having *one yellow strand*. Its wire is drawn in the celebrated Sheffield District, from steel of Swedish origin.

Yellow Strand is a heavy duty rope that finds best opportunity to show its mettle under severest operating conditions.

## Broderick & Bascom Rope Co.

St. Louis, Mo.

*Eastern Office and Warehouse: 68 Washington St., N. Y.*

*Western Offices: Seattle and Portland, Ore. Factories: St. Louis and Seattle*

*Manufacturers of nothing but wire rope for over half a century*

# Yellow Strand WIRE ROPE

N 791



In a Broderick & Bascom Aerial Wire Rope Tramway you may find exactly the economical method of haulage that you have been hoping for. Investigate!



did not put in any antigrift arrangement as between the local authorities and contractors, they did set up much the same financial arrangements for repayment as at Barranquilla.

Incidentally, their representative, put in charge of collecting the country's export and import duties in order to see that the agreed amount of interest and amortization went North each month, did so just and altogether satisfactory a job Salvador asked him to add to his regular duties the job of financial advisor to the government in connection with *all* its financial problems and Guatemala later offered him a similar invitation.

A further point is that the American contractor hired to apply to the waterworks and new pavements those dollars that Uncle Sam's bondbuyers loaned, naturally purchased most of his supplies from American manufacturers—establishing, by the way, so good a reputation that today the mere nod of his head is considered in Salvador better than most people's signature!

## Helps our export trade

ONE point more for that story. Every single one of those 20 trucks making that trip in one hour and 55 minutes on the road that was paved with the help of the gold that you and I loaned was fabricated and assembled by machines and men in a certain factory in Cleveland out of steel and accessories bought everywhere in America.

Whether in Barranquilla or Bloomington, Salvador or St. Louis, we humans never like people that step on either our physical or our spiritual toes. Unfortunately, the less our contact with the outside world, the easier it is for the experienced "slicker" from abroad to come along and step on our toes once! After that, whether we are North Americans, or South, or Central, we try to protect those toes by being suspicious of every one of the slicker's fellow citizens, good or bad.

Under such conditions, and our State Department has known altogether too many such conditions, the only thing that can be done is to try to change suspicions by changing experiences.

Certainly nobody can get a close-up of the good deeds of that surprising *junta* there by the great Magdalena without feeling that we have only begun to scratch the surface of the huge possibilities for the good both of the Americans to the South and of ourselves, presented by the proper kind of cooperation in the meeting of our mutual needs.



# IS \$25,000 A YEAR

## an impossible goal for the average man?

**YES**, \$25,000 a year probably is an impossible goal for the average man. But this page is not addressed to average men.

This page is addressed to men of character and foresight. It is addressed to men who aspire to become stockholders in their companies or to go into business for themselves. It is addressed to men who possess both ambition and ability in a marked degree. For men of this calibre, \$25,000 a year should not be an impossible goal.

It's true that many Institute subscribers are not making \$25,000 a year. But hundreds of them are making more than that, and hundreds more will reach that figure.

### Do you want more money?

Ask yourself this: "Why should anyone pay me more next year than this? Just for living? Just for avoiding costly blunders?"

You are devoting most of your working time to business. What are you doing to make yourself more expert at business?

Here is the Institute's function in a nutshell: It first of all awakens your interest in business, stimulates your desire to know, makes business a fascinating game. And second, it puts you into personal contact with leaders, thrills you by their example, makes you powerful with their methods. Is it any wonder that Institute men stand out above the crowd?

For more than twenty years it has been the privilege of the Institute to help men shorten the path to success; to increase their earning power, to make them masters of the larger opportunities in business. More than 378,000 men have profited by its training.

We wish you could read the letters that come to us in every mail. Here are some examples:

"Institute training paid me a 200% dividend in two years."

"I owe the Institute for the training that increased my income 1500% in nine years."

### WHAT THE INSTITUTE GIVES YOU

**VOLUMES**—A complete business library in 24 volumes covering all phases of business.

**READING GUIDES**—Your reading is carefully planned and directed.

**LECTURES**—Well-known business men tell their experiences in handling business problems.

**PROBLEMS**—Tests of your business ability. Correct solutions furnished.

**REPORTS**—Detailed reports on business subjects you are particularly interested in.

**BUSINESS CONDITIONS SERVICE**—Up to the minute information on business conditions. Service includes (a) Business Conditions Weekly (b) Investment Bulletins (c) Trade Bulletins (d) Credit and Sales Bulletins.

**PERSONAL INQUIRY SERVICE**—Advice on your personal business problems; expert analysis of your investments; information about credit and sales conditions in any locality, etc.



Hundreds of Institute subscribers are making \$25,000 a year or more

"What I have been able to apply already from Volume I, more than offsets the cost of the Course."

"I have never heard of anything in which a man could invest so little and get such large rewards."

"I give the Course due credit for its part in my rise in six years from salesman to president of this company."

Our records are filled with hundreds of letters of the same kind. The names of these men are available to anyone who cares to write for them.

### You may be missing your goal by only a hair's breadth

Has the man who makes twice your salary got twice as much intellectual ability as you have? Not at all. Has the man who makes \$25,000 a year got five times as much brains as the man who makes only \$5,000? By no means.

It is one of the tragedies of business that so many thousands of moderately successful men just miss a really substantial success.

It is amazingly easy to transform a moderate-salaried man into a high-salaried man. So little is required that the wonder is that more men do not avail themselves of the opportunity.

The difference between a modest salary and a good salary is not entirely a matter of brains. Not a matter of pull. Not even a matter of long experience. Often by using the Institute Service in only a very small way, men find all that they need.

Many men never complete the Course at all, but merely use the volumes and lectures and the personal consultation service, as occasional helps when the need arises. In case after case the impressive thing is that very little is required to give a man the extra assets that he needs.

### Send for the facts

It is impossible in this space to give you a complete idea of what the Institute can do for you. It is impossible to list all the ways in which the Institute can help you. But we have prepared an interesting booklet called "Forging Ahead in Business," which gives all the details.

Do you care enough about your financial welfare to give us a chance to show what we can do for you? Will you invest one single evening in reading this book which has put 378,000 men on the road to larger incomes?

"Forging Ahead in Business" is an interesting, helpful book. It costs you nothing. Send for your copy today.

ALEXANDER HAMILTON INSTITUTE  
909 Astor Place New York City

Send me the latest edition of "Forging Ahead in Business," which I may keep without charge.

Signature \_\_\_\_\_ Please write plainly

Business Address \_\_\_\_\_

Business Position \_\_\_\_\_

## ALEXANDER HAMILTON INSTITUTE





UNDERWOOD AND UNDERWOOD

Sixty of the 86 employees in this leather factory are former convicts

# Gangsters Help Them Stop Crime

By WILLIAM INGLIS

**W**HAT we want to do is to get out of the fur-stealing racket and go into manufacturing furs on the level," said Larry Mandon to me across the table. We were seated in a quiet resort for knockabout boys, which, by the way, looked like any other medium-priced restaurant. Larry is the chief of the organized fur thieves, and what he told me about that sector of organized crime and the eagerness of his gang to get out of it turned a flood of light on the crime situation throughout the country—and the possibility of curbing it.

He talked frankly to me, a stranger, because the leader of the Marshall Stillman Movement vouched for me as a right guy; that is, one to be trusted. That society has helped hundreds of men out of lives of crime and then kept

them out. More about that later.

"The furs we take"—Larry did not seem to think of it as stealing—"are worth millions of dollars, but all we get out of it is a living, and not much of a living at that," he continued. "There

are 125 of us in New York City. All any of us gets is ten per cent of the value of furs we turn in to the 'fence.' That means that each one of us has to grab \$30,000 worth of furs every year to make a living. Figure it—125 men; \$3,750,000 a year. And I'm telling you we're sick of the racket.

"Any man gets sick of a game that gives him a bare living and leaves him liable to be pinched any minute and sent up the river for a long stretch. Listen. When you've been in the racket a few years you know you're a dead loser, but you can't get out unless you have help. If the Marshall Stillman people can help us to run a fur business straight, you'll never find one of us stepping out to do another job. That goes for all the boys."

"But suppose they



**WOULD** you try to stop a criminal with a set of boxing gloves? Alpheus Geer did and his success led to the founding of the Marshall Stillman Movement which believes it has found a way to cut in half the ten billion dollar crime tax this country now pays every year



# Serve the 6 BILLION DOLLAR SOUTHWEST MARKET from DALLAS , , , THE CENTER\*

## \* GEOGRAPHICAL CENTER



Dallas is located in the heart...of the geographical center...of the Southwest market, comprising Texas, Oklahoma, Arkansas and Louisiana. One of America's important markets, remotely situated from other principal markets.

## \* TRANSPORTATION CENTER



Rail, bus, truck and air lines radiate from Dallas to all parts of the Southwest market. The richest portion of the Southwest market is within a 300 mile radius of Dallas.

## \* DISTRIBUTION CENTER



American business has chosen Dallas as distribution headquarters of the Southwest market. Nearly 2000 national and sectional concerns maintain branches in Dallas. Distribution and warehousing facilities are complete and modern.

## \* RAW MATERIAL CENTER



Cotton, wool, mohair, grain, fruits, livestock, timber, silica, cement, kaolin, oil, sulphur, gypsum and many other raw materials abound in the Southwest, with a majority of the principal products within easy range of Dallas.

## \* POPULATION CENTER



Dallas, with a population of more than 300,000 is in the center of the Southwest's population of more than 12 million. Labor, male and female, is plentiful and seeks industrial employment at favorable wage scales.

## FUEL AND POWER CENTER \*



The Southwest is America's greatest oil and natural gas belt--and has tremendous electrical resources. Fuel and power rates are relatively low. Lignite abounds. Dallas is the center of gas and electric distribution for the Southwest.

## INDUSTRIAL CENTER \*



Dallas leads in Southwestern manufacturing, because of its central location, its nearness to raw material, labor and power resources, and its lower transportation rates in serving the Southwest market.

## FINANCIAL CENTER \*



The Southwest market of which Dallas is distribution center has annual buying power of more than 6 billion dollars. Dallas stands in the forefront of Southwestern finance. Dallas is headquarters for the 11th Federal Reserve District.

Dallas is truly a center of Southwestern activities--a strategic base from which to serve profitably the 6 billion dollar Southwest market. To give business executives a better understanding of Dallas and the Southwest market, we have published the seven reports listed on the coupon below. These reports, covering all essential phases of Southwestern resources and distribution facilities, have proven invaluable to American business leaders who have received them. If you have not received your copies, send for them now. Just check the particular reports you wish and mail the coupon now--or write us on your business letterhead. All inquiries are held strictly confidential.

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1500 Chamber of Commerce Bldg., Dallas

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can't raise the money to help you run a straight business?" I asked.

"Well, we're not going to starve," Larry answered. "And we won't let our kids starve. That wouldn't be human. But at that, we'll work our fingers off to make a bare living rather than be dodging trouble all the time, never knowing what minute we'll be grabbed and sent away. I'm not giving you a lot of applesauce about wanting to be honest. What we're after is a decent living for ourselves and our families, and no more time in the Big House."

### A manager of the "trade"

THERE could be no doubt of Larry's earnest sincerity. He turned from me to consult with Alpheus Geer, founder of the Marshall Stillman Movement, about plans for a legitimate fur business, and I studied him with care. He looked like any other well-fed, well-dressed, prosperous New Yorker, with years of business experience and an easy air of command.

His features showed none of the stigmas of criminality so much emphasized by the experts. His eyes were full, clear, direct. His speech was the speech of the average New Yorker, no better, no worse. He knew what he had to offer and what his men needed, and he talked like an intelligent executive about materials, machines, rents, wages, and sales.

The conference would have seemed fantastic if I had not known of the results already achieved by the Marshall Stillman Movement in its 12 years of activity. Beginning in a small way and gathering headway slowly—because people generally are skeptical about the possibility of changing a gangster into an honest, hard-working man—the organization has placed about 300 highwaymen, burglars and similar criminals in regular and steady employment.

They have stuck to their jobs, worked with a little more energy than the lucky fellows who have never felt the sting of the criminal law, and have become industrious, useful citizens. More important, these men have learned that honesty pays, and they are helping their friends to climb up out of the underworld. They are missionaries for honesty. They enjoy doing good.

Since the conversation re-

ported above, the Marshall Stillman Movement has interested several men who, at this writing, are gathering the money that will rent and equip a factory and salesroom with which 25 of the late fur thieves will enter a legitimate fur business. They are expert furriers. Their prospects of success are good.

They will not only add their share to the progress and prosperity of the community, but it is fairly certain that none of them will steal in the next 12 months. That means that these 25 men will earn some \$75,000 by honest work during the year and that \$750,000 worth of furs will be saved from theft. If they act as scores of other Marshall Stillman men have acted, they will never steal again.

While we may feel sure that the figures quoted give a fairly accurate record of the value of furs stolen in New York every year, since they were furnished by the leader of that criminal industry—ex-leader now!—yet it is certain that no one can even approximate the amount that crime of all kinds costs the people of the United States. The most popular guess among bankers, merchants and heads of transportation companies is that it runs to ten billions of dollars a year; but that is only a guess

at best. There is no tabulation by states and not much by cities. While it is possible that this estimate is too high, it is quite as likely that it is too low, and that Americans pay a yearly bill for crime well in excess of ten billion dollars. Since the officers of the Marshall Stillman Movement, backed by the estimates of the experts they have rescued from crime, declare that they can cut that wastage in half, it would be interesting to know just how big a job they are tackling; how big, that is, as measured in dollars.

### Crime is a big business too

THE National Crime Commission, of which Newton D. Baker is chairman, has been studying the problem for more than a year, and frankly admits the impossibility of arriving at anything like an accurate accounting for a long time to come.

One thing is certain. Just as every kind of business, from international banking to peddling peanuts, is more highly organized and developed today than ever before, so is the business of crime more highly organized and developed.

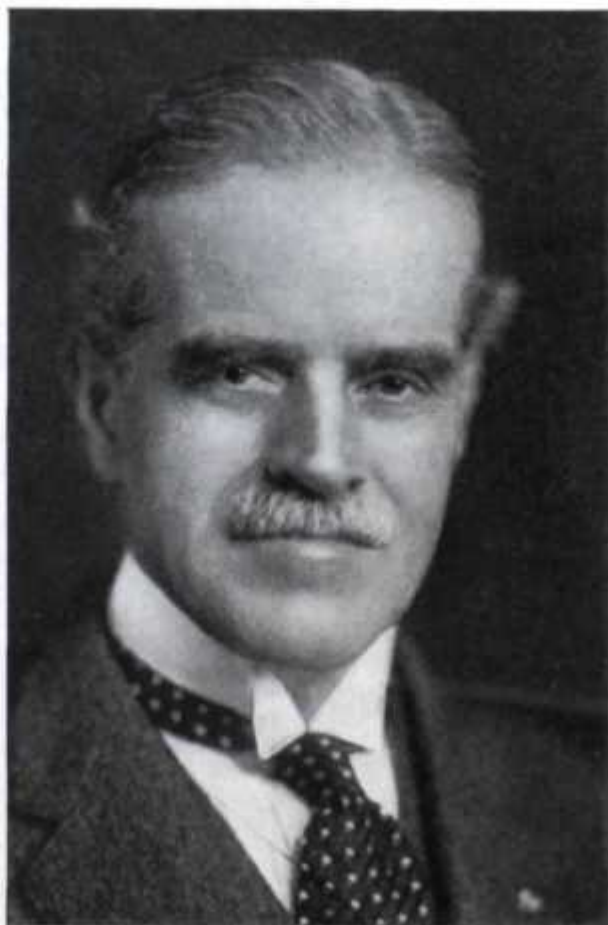
Here is one item:

Reports to the National Association of Credit Men and to the American Institute of Accountants show that recent losses by fraudulent business failures average about one billion dollars a year. Assuming that only one crooked failure out of three comes to the attention of these bodies, it is estimated that honest business suffers 300 million dollars loss by this kind of fraud every year.

And this is only one branch of crime. When to this are added the losses by silk, furs, jewels and automobile thievery, by pay-roll holdups and general highway robbery, by arson on overinsured business, by forgery, counterfeiting and picking pockets, the total soon soars among the billions.

And whether the thief is a footpad, the expert burglar in furs, silks and jewels, the adroit purloiner of your car, or the mercantile crook who defrauds his creditors, each and every one would be unable to do business if it were not for the "fence."

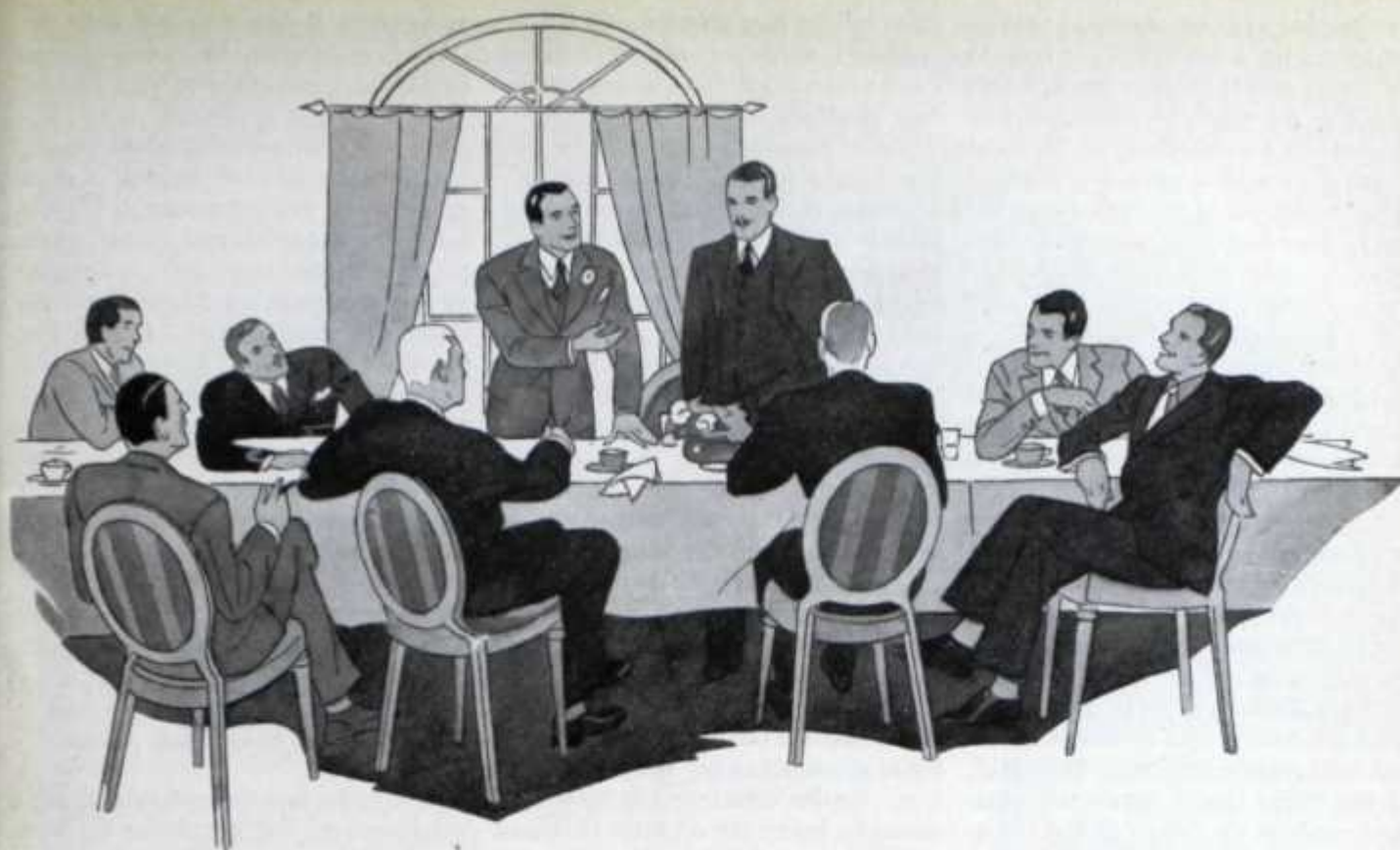
The "fence" is the receiver of stolen goods. He takes what



ALPHEUS GEER

He broke up some of the toughest gangs in New York by proving he was a 'right guy'





**“--who arrived by air”**  
*new business contacts constantly await executives  
 who travel by plane*

Business executives who travel by private airplane are popular visitors—invitations and introductions naturally follow. As honored guests at luncheon clubs and at business dinners they find unexpected opportunities to make new and valuable friends.



Throughout the country, many companies now operate their own Ryan planes for business trips—provide their executives with the advantages of air transportation. For not only does traveling by airplane multiply the

opportunities for officials to make new contacts but more important still it enlarges their field of activity.

With a cruising range of 700 miles and speed of 150 m.p.h. Ryan airplanes figuratively reduce the size of a state to that of a county. In time saved, alone, Ryans pay their own way. Today Ryan airplanes are contributing to the greater success and prestige of many business houses. Let us tell you more about what has been accomplished with Ryan transportation.

BUILDERS OF LINDBERGH'S



"SPIRIT OF ST. LOUIS"

RYAN AIRCRAFT CORPORATION

DETROIT AIRCRAFT CORPORATION

DIVISION OF

Robertson, Missouri

Union Trust Building, Detroit



the thief brings in, ships it away to market, cooks up a bill of sale to account for it and sells it to some unscrupulous jobber or merchant, who unloads it on the public. An officer of the National Crime Commission gave this example of the operations of the "fence" and the highly organized gang who work with him:

### Interstate legal tangles

"AN ENTERPRISING criminal scout," he said, "found not long ago that throughout a certain state—call it Dakota—there was a wide demand for a certain kind of fabric. He so reported to the central organization in New York. Spies watched the factory in New Jersey that made the fabric, and, when enough of the goods was on hand, raided the place at night.

"They clubbed, tied up, and gagged three watchmen—had to shoot one before they could subdue him. They loaded five motor trucks with many thousand yards of the fabric, took it out to Dakota, and delivered it to the 'fence,' who sold it at a big profit, which was divided all the way down the line. No arrests."

"Why no arrests?" I inquired.

"Because the crime was committed in three separate states," was the answer, "and it would have cost any one state more than the value of the stolen goods to run down and arrest the scouts, the spies, the gangsters and the receiver of the stolen goods. The cost of finding and supporting witnesses and bringing them great distances to court, plus the law's delays, makes it almost impossible to punish such crimes as this. And the loot of nearly every kind of robbery is regularly disposed of in this way—sold at a great distance from where it was stolen."

There is a fair chance that the "fence" soon may be driven out of business. The National Crime Commission, made up of leaders in every kind of business throughout the United States, tried to persuade the last Congress to enact a law making it a felony to ship stolen goods from one state to another. The bill barely missed passage at the last moment, and it is expected to pass the present Congress. If this bill becomes a law, interstate shipment of loot will be a federal offense, and federal authorities will be able to bring the robbers, the "fences," and witnesses from various states to one court for trial. That is expected to drive the "fences" out of business and thus to cripple organized stealing wherever it uses means of interstate commerce. Those who know the situ-

ation believe that this law will kill the organized wholesale robbery business, for the thieves will have no markets for their goods.

One of the most difficult problems on which the National Crime Commission is working is that of the pay roll holdup. Hardly a day passes without one of these spectacular robberies. Messengers carrying thousands of dollars in cash from bank to factory on pay days are held up by gangs in fast cars. The money losses run far up in the millions. The quick swoop of the automobiles and the difficulty of identifying the robbers or their cars make detection almost impossible. The Commission hopes to develop a plan to end this form of robbery; able minds are working on it.

How the present crime situation imperils the life and welfare of every American citizen was emphasized by President Hoover in one of his addresses last spring. He declared that the obtaining of obedience to law and the suppression of crime constitute the most vital questions before the country. He stated that more than 9,000 human beings are lawlessly killed every year in the United States and that less than one-sixth of the murderers are adequately punished; and he continued:

"Life and property are relatively more unsafe here than in any other civilized country in the world. In spite of all this we have reason to pride ourselves on our institutions and the high moral instincts of the great majority of our people. . . . The real problem is to awaken this consciousness, this moral sense."

### Two attacks on the problem

THE President's reasoned opinion that "the real problem is to awaken this moral sense" expresses the idea that animates the Marshall Stillman Movement. Its members, from the oldest officers to the youngest boys from the street corners, have worked for years to help their friends to want to do right. The National Crime Commission is striving to strengthen the law-enforcement mechanism of the nation. Each of these organizations is doing its utmost in its own field to abate the conflagration of crime—one fighting it from without, the other quenching it from within by wiping out the desire to rob. The National Crime Commission seeks to suppress crime by detecting and punishing the criminals. The Marshall Stillman Movement tries to make men unwilling to commit crime.

That latter endeavor may sound Utopian, extravagant—but the fact re-

mains that it has won not only depressed ex-convicts, but many active, flourishing gangsters into lives of usefulness.

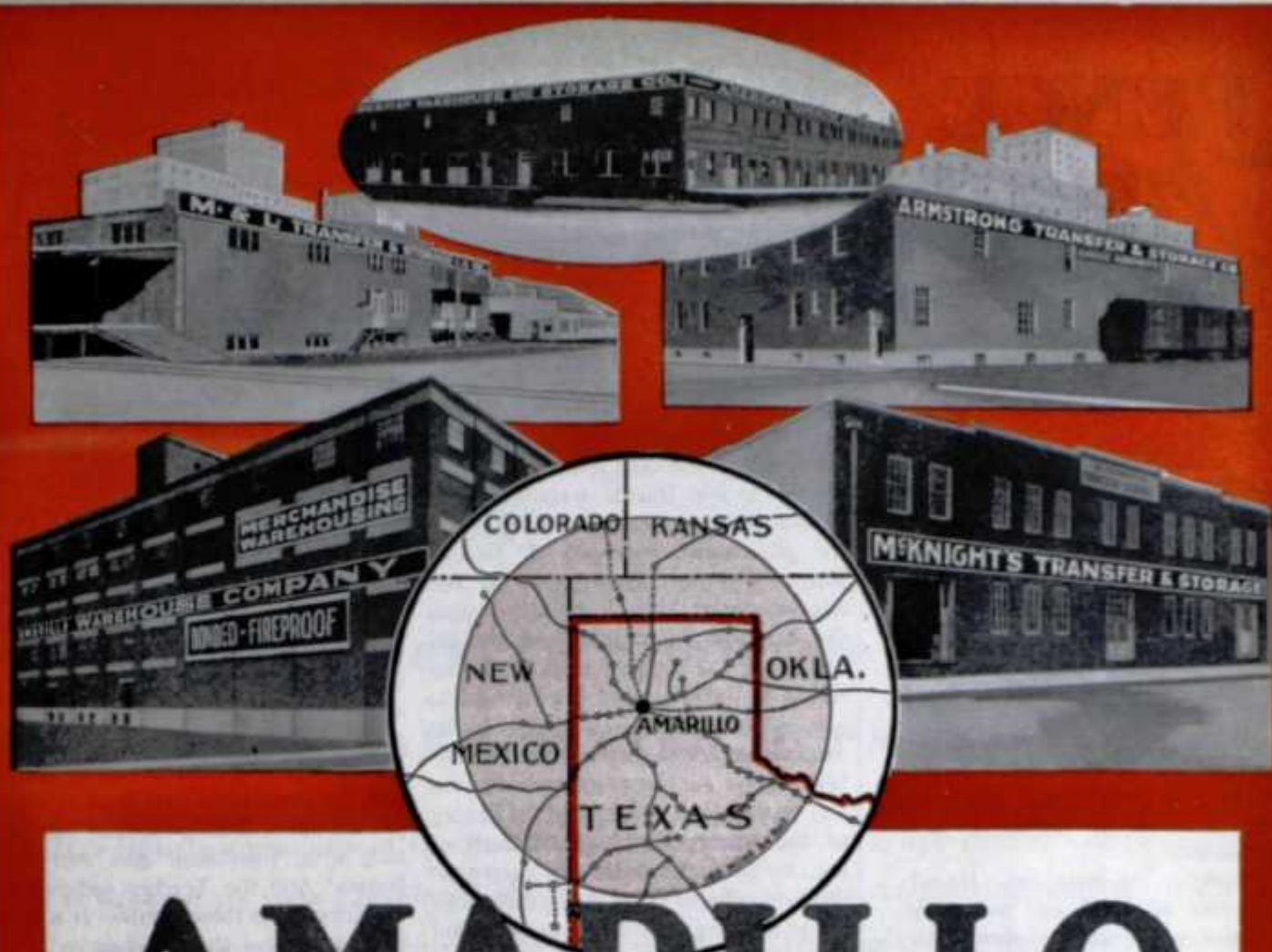
Alpheus Geer, a retired silk merchant, discovered the germ of the idea 12 years ago, when he stopped rowdiness in Nutley, N. J., by coaxing wild youngsters off the street corners into a fine gymnasium. If this was good for Nutley, he wondered, why shouldn't it do some good in his native New York? With the help of friends in the Police Department he discovered the toughest gangs in the city—the Wales Avenuers and Tinton Avenuers and other knockabout bunches up in the Bronx. He began his experiment by establishing a gymnasium which attracted these lads and kept them off the corners. These young fellows were at war with the police; they were a peril to the community.

### He proved to be a fair player

GEER was a first-class amateur heavyweight boxer, and he taught the lads boxing. They respected him because he never abused them with his superior speed and punching power, and especially because he never preached to them. He was simply a right guy, a fellow who played fair—and merely incidentally pointed out that the square shooter was the winner in the game of life and that crooked work did not pay, in the ring or out. The members at first were youngsters from the tenements who had not yet committed serious offenses, but were on the borders of criminality. The gymnasium helped the boys get into excellent condition; its boxing matches and other strenuous competitions satisfied the love of adventure which otherwise might have led them into conflict with the law.

Friends of Geer saw how much good the gymnasium was doing, and with their aid the enterprise was gradually developed into a club, now established in East 105th Street, called the Marshall Stillman Movement Service Club, in honor of a philanthropist of long ago. The club soon faced a serious problem—how to help comrades of members who were really right guys at heart but who had got into trouble and had served terms in prison. It was not difficult to prove to these unfortunates that honesty was the best policy; but men with the prison whisper in their speech, the prison pallor on their faces, and wearing the awkward free clothes the state gives released convicts, found it hard to get honest jobs. The Club took in all the right guys it could find room for, trusted them for the cost of board and lodging,





# AMARILLO

## *One of the Three Distributing Warehouse Centers of Texas!*

**A**N area larger than Pennsylvania, with a population of 850,000, looks to Amarillo as its distributing center. Last year 3,185 carloads of merchandise were handled through the city's 355,000 square feet of warehouse space . . . 151 lines in 26 commodity classifications, many of them on a concentration point and storage-in-transit rate basis.

Amarillo is served by transcontinental railroads . . . the Burlington, the Rock Island, and the Santa Fe . . . with no switching charge between lines. Merchandise is re-shipped in nine important directions by rail, with a tenth applied for; and by a fleet of more than

200 trucks. Twenty bonded and insured truck lines operate out of Amarillo on regular schedule under Class A Permits over routes designated by the Texas Railroad Commission, to provide quick service to every community in the entire trade area.

The nearest outside cities equal in warehouse and other distribution facilities are from 274 to 464 miles distant. Thus it is evident that with the remarkably adequate facilities for quick, economical service, time and money can be saved on many a product by handling it through Amarillo.

*Railroad, truck line and warehouse rates, and other information on your product or commodity will be furnished gladly. Write today to Traffic Manager:*

**AMARILLO CHAMBER OF COMMERCE**  
**AMARILLO, TEXAS**





# FENCE that protects industry

**WICKWIRE SPENCER**  
Chain Link Fence is a real protection. The character of the mesh, the height and angle of the barb wires make it unclimbable.

And it's permanent. Heavy sections of steel and wire are coated with molten zinc after they are fabricated. Galvanizing of this character, withstands the ravages of all weather conditions. The posts are embedded in concrete foundations. The price of this fence is surprisingly low in view of its strength and permanency.

**WICKWIRE SPENCER STEEL CO.**  
43-49 East 42nd Street, New York City

*Local Sales and Erecting Offices*

Worcester	Chicago	Los Angeles
Buffalo	Atlanta	Seattle
Cleveland	San Francisco	Portland



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and helped them get jobs that allowed them to live without fear of the law. Also they could pay back the board money, in order that others coming down the river could have the same help. Distinctly the club was neither a charity nor an institution of reform; it was a bunch of right guys eager to help other right guys go straight and enjoy life.

With \$150,000 contributed by Robert Law, Jr., another Marshall Stillman Club was established on the lower East Side, where it has operated for years along the same lines. While both clubs functioned chiefly by awakening among lads from the tenements ambition for something better than crime, there were always a few friends coming out of prison, and they were never left to shift for themselves. Frederick J. Groehl, former Assistant District Attorney and Magistrate of New York City—familiar with criminal practice and emphatically not the type of man to be deceived by fakers—gave employment to a good many of these ex-convicts in the Amazon leather factory in West Twenty-Sixth Street. He was so impressed by the way they worked that he sold the factory to the Marshall Stillman Industries, Inc., for \$100,000, which was merely the physical value of it. He charged only one dollar for the good will of this successful business.

## The ex-convicts work well

OF THE 86 employees in the factory, 60 are ex-convicts. They worked so faithfully and intelligently during 1928 that they increased the output of the factory to \$700,000 for the year, as compared with \$300,000 for the year before. The profits were 20 per cent higher, and the concern paid dividends of eight per cent besides a big bonus, half of which was divided among the employees. Not one of the ex-convicts quit his job—it meant not only a living but a refuge from the law—and they seemed to learn faster and to work more zealously than men who had never been in trouble. Perhaps years of warfare with society had sharpened their wits.

"How do you change gangsters and robbers into honest workers?" I asked Alpheus Geer. "What are the principles you follow in coaxing them into the right way and keeping them there?"

"The big thing," Mr. Geer replied, "is that every man wants to help his fellow man. Don't write about us as reformers. We are not. What the Marshall Stillman movement does is to make friends with a man, show him that it pays to live the honest life, that we will

help him to live that life and give him the chance to help others. And the most powerful motive in persuading a man to live right is the opportunity the right life gives him to help his neighbors. That is the force that enables us to draw men away from crime. You understand, of course, that the whole approach is on a basis of friendliness, not of preaching.

## It's human to do good

"IT'S simple when you look deep enough into human nature. Everybody wants to be somebody. The vital essence of humanity being good, the surest way for a man to express himself and amount to something in the world is by doing good. That rule holds good with saint and sinner, honest man and criminal. And the highest form of doing good is to help one's neighbor. The reaction of such service is always constructive; it is the same spiritual quality that was stressed 2000 years ago.

"You remember how the doctrine of giving was emphasized—'Give and it shall be given unto you; good measure, pressed down, shaken together and running over, men shall give into your bosom.' And the Teacher summed up the principle in these words—'It is more blessed to give than to receive.'

"These are the laws of life. We have proved them many times. We have always received the same reaction from the most desperate criminal that we would from the average citizen of the upper world. Meet a man as a friend, treat him fairly, show him how he can do some good in the world, and he'll go straight. A chance to grab easy money by crime will not appeal to him—because of his new-found self-respect and his love of liberty.

"Organized society has fought a losing battle with crime for ages because it has constantly ignored the great spiritual law of giving. Society has relied on punishment to repress crime, when it should have relied on the law of love and giving, which is the strong recreating force for good. Even the individuals and organizations that have served the poor and needy have generally forgotten to give them the most vital part of charity—that is, the chance to help and give to others. Men do not want to be dependent. It stifles them.

The best way to rehabilitate the criminal is not to preach to him but to explain to him the laws of life and give him the chance to serve mankind. It is wonderful to see how quickly the knock-about boys grasp the idea. In the underworld they are always helping one an-





W. E. CONLEY  
illuminating engineer

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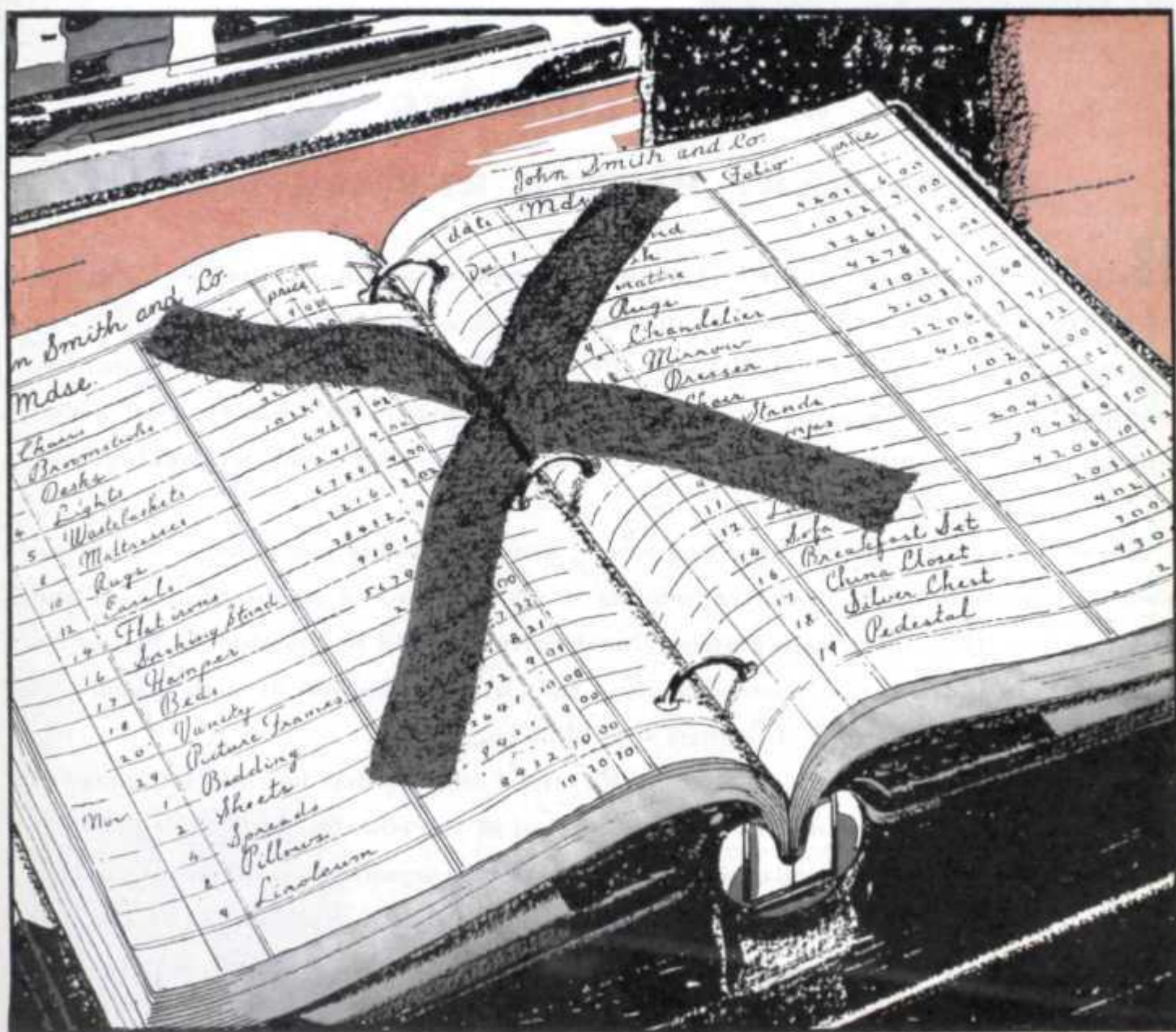
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These are typical of the multitude of *external* forces, personified by X, that surround your business today. Every day X writes in your business ledger—in *red ink or black*! You cannot ignore X . . . you dare not defy him! But you can—and *must*—understand him.

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# BUSINESS





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other—staking an unfortunate to a meal, to a few dollars, or helping him to dodge the 'bulls.' Give the wrong thinker his chance to do good, and you automatically make him a right thinker.

"We make honesty more profitable and pleasant than dishonesty, and nobody can turn away from it—wouldn't be human if he did.

"I am convinced that, when we get enough Marshall Stillman branches throughout this country, we can persuade so many men to give up crime that we can cut out more than half the crime in America. Think of saving five billions of dollars a year for the American people! But, far better than that, think of saving thousands of mistaken men from going on to destruction, and of making them worth-while citizens. There is something you can't reckon the value of, even in billions.

"Every criminal I know who is 18 or older has lost the glamor of crime, knows it does not pay, and is eager to get out of it. You have talked with the leader of the fur thieves, and you know how earnest they are in their desire to live right. They are free men today, but they choose to earn their living by hard work rather than to go out and take a chance. We have persuaded successful highwaymen to make the same choice. It may be easy to convince a man who is just out of prison, broken by long punishment; but when you convince a

husky lad, running free and packing his blackjack and his automatic, that he had better quit the graft and go to work—you've got to win him by real proof, not fancy theories. And we've done that again and again."

## Other cities seek clubs

AMONG the 30 directors on the governing board of the Marshall Stillman Movement are such able and practical men as John McEntee Bowman, chairman; Edward F. Hutton, Jules Bache, John N. Willys, Joseph Baldwin, Paul Felix Warburg, Robert Law, Jr., and Julius Rosenwald. Business leaders in Chicago, Los Angeles, San Francisco and Birmingham, Ala., have invited the Movement to open clubs in their worst districts.

"We hope," said Mr. Geer, "to see a great change within a few years. One-tenth of our criminals seem to have a hopeless bent toward wrong. They should be cared for in asylums, not prisons, and kept from preying on society.

"But nine-tenths of the criminals are as normal as any of us in their responses to suggestions of good. The vast majority of them will live right if some one will show them. We can bring in the active mobs, the able lads, and give them the chance to be real citizens. They will be as glad to come in as we are to welcome them."

## Building Towns for Safety

"AMERICA is still built for horse and buggy traffic," writes J. Paul Atwood in the *Journal of American Insurance*, and to that fact he ascribes the constantly growing toll of pedestrian fatalities in our city streets. Of all automobile fatalities, he notes, 36.7 per cent are among children under 15, while the injured youngsters in 1928 alone were numbered at more than 16,000.

"As our cities are built today," he continues, "the average child is compelled to cross at least one main automobile highway in walking between home and school." The need of a new scheme of communal development is evident, he concludes, and adds

already several communities which will be safe for pedestrians are being constructed. Radburn, a new city being built in New Jersey, 13 miles from New York, has been called the "town for the motor age" because it has attempted to solve scientifically the problems of traffic and safety.

Instead of following the gridiron or

checkerboard street system, which was designed for the horse and buggy age, an altogether different plan has been devised. In this model city, pedestrians will have a separate system of walks which do not conflict with the roadways. . . Children will be able to go to school without crossing a street.

Each house has two fronts, a motor entrance and a garden entrance. Friends arriving by automobile . . . go in the motor entrance or service entrance by way of the short closed-end streets around which the houses are grouped. An entrance on the other side of the house opens on the garden, at the end of which is a path for those who come on foot. This path connects with the footway system in the park, while the motorways, or closed-end streets connect with wide traffic avenues.

A number of these closed-end streets with the houses grouped around them make up a block many times the size of the ordinary city block, with traffic avenues as its boundary and a long park strip in the center. In the blocks now being built, the parks are to be joined by an underpass where they are crossed by a traffic street.



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Reo pays 10% to 25% more for parts—and as a result these parts will stand a strain 50% to 100% greater than even a salesman in the backwoods territory would possibly give a car.

And we don't ask you to take our word for Reo's long life. Look up the most recent investigation of long life in motor cars—an impartial analysis based on government registration figures. It shows Reo to be the longest-lived of all cars of American origin and manufacture regardless of price! "Reo—good for 100,000 miles" isn't a slogan—it's a fact!

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The Reo will climb to 70 in 26 seconds from a standing start. And Reo brakes will stop you—at any speed—in half the distance the stiffest traffic laws require. What's more, they'll stop you without side-sway and without skidding, so perfectly are those brakes equalized. They *stay* equalized, too. And wet weather cannot affect them!

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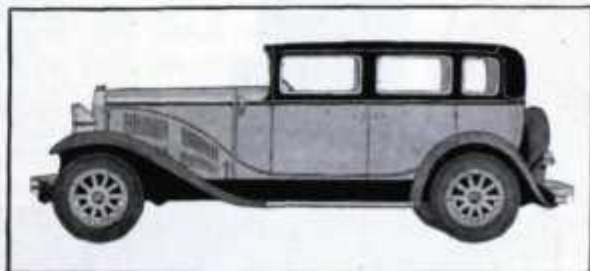
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# Shall Retailers Join The Chamber?

By PAUL R. LADD

Secretary, Retail Merchant's Division, Providence Chamber of Commerce

**W**HAT shall be the future relationship between the local retail group and the chamber organization? Retail merchants have a general interest in the upbuilding of a city which expresses itself through the chamber of commerce. This general interest is inherent and obvious.

In addition, however, retail merchants have a special interest of their own of such great and increasing importance that it is transforming and enlarging the purposes and functions of the retail groups. Economic necessity has forced merchants collectively to study their common problems and to effect all improvements and economies possible.

The retail groups, therefore, have evolved into local trade associations in order to secure the advantages of cooperative action in the field of distribution. Their programs include not only sales promotional efforts but activities and measures which tend to, (1) eliminate waste, (2) reduce costs, and (3) give better service to customers.

## Merchants can help chamber

THE fact that the merchants give their influence and dollars to the chamber of commerce is recognition on their part that they have a large civic interest which is outside of the purely trade activities. It means that they feel strongly that a chamber representing all elements of the community which care to participate, provides a proper mechanism for crystallizing public opinion effectively to promote the general welfare of the city. The retail merchants' trade interests, however, should not be ignored or unduly limited unless the chamber prefers that there be a separate retail association in the city acting independently of the chamber.

There exists today nearly every degree or organizational relationship between retail merchants' associations and chambers of commerce. These may be classified in three distinct forms: (1) that in which the retail association is independent; (2) in which it is affiliated with the chamber; and (3) in which it

is an integral part or subject to the chamber of commerce.

Some cities in the first group, having independent merchants' associations, are:

Akron	Columbus	Nashville
Atlanta	Indianapolis	New York
Baltimore	Kansas City	Pittsburgh
Buffalo	Los Angeles	St. Louis
Cincinnati	Memphis	Toledo
	Minneapolis	

Others, in which the retail associations are affiliated with chambers, are:

Boston	Detroit
Cleveland	Seattle

Some of the cities of the third group, having retail organizations which are integral parts of, or which are subject to, the chambers of commerce, are:

Dayton	New Orleans	Rochester
Denver	Philadelphia	San Francisco
Milwaukee	Providence	Springfield

This lack of uniformity is significant. Each group contains important cities. Of these cities, the largest number have separate and independent associations. One would expect to find more uniformity and also to find that such uniformity favored a closer tie-up with the chambers in view of the natural desire for close cooperation in the mutual interest of the two groups.

The reason that retail merchants have not more uniformly identified their organizations with their chambers of commerce seems to be that the chamber organization structure in many instances has not kept pace with the changing conditions which have necessitated the developments and extension of local cooperative trade enterprises.

There may also have been a tendency or a desire on the part of some chambers too autocratically and perhaps too selfishly to control the activities of the trade groups.

Frederick W. Aldred, a director of the National Retail Dry Goods Association, has said the reason so many merchants' organizations are functioning separately and independently of chambers of commerce is "that proper recognition is not given to the fact that merchants have all

the general interests of all the other members, together with other certain and very important special interests which need to be considered and passed upon separately and independently. The chamber of commerce with vision will keep in tune with these times of increasing cooperation and combination by creating new and affiliating all existing special local business interests, such as retailers."

An organization plan, determining the relationship between the chamber of commerce and the more closely knit unit, the trade group, to be mutually acceptable, needs to take into consideration the general proposition that the local retail unit has emerged into a full fledged cooperative trade organization.

## Retailers need own group

THE groundwork of any remodeling requires at the outset that greater emphasis be placed on retail-group activity. No longer should there be a fear of "overshadowing" activity when such activity is actually helpful rather than harmful. No longer should chamber departments, such as transportation, which are of practically equal interest to all members, be considered in the same light, from an organization standpoint, to a body of retail merchants which has independent special interests involved.

A clear-cut distinction between units having general functions of a chamber and units having special trade interests is a prerequisite to the final adjustment.

In large cities, particularly, the organization structure of chambers must be molded to accord local trade groups at least an affiliated or semi-independent status. Such a status is important because of the activities legitimately included in a trade-group program, which may call for any or all of such specialized services as Credit Bureaus with Collection Departments, Employees' Reference Bureaus, Stores Mutual Protective Associations, Store Policy Agreements, Cooperative Buying, Co-operative or Consolidated Delivery





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A broad organization plan for those cities where trade consciousness and activities have developed to a high degree would necessarily provide for retail control and management of retail affairs and tend to prohibit unjust pressure and influence of other groups in the chamber from being brought to bear against the chamber or the retail activities, or both.

The foregoing treatment has dealt with the subject chiefly from the standpoint of the large city. The same problem of relationship, however, exists in a modified form, in the smaller city and town.

There has been a belief that in the smaller chambers of commerce, a retail section or division cannot be established without detriment to the chamber. The theory, in this connection, has been that the retail merchants who represent the largest group numerically would make too formidable an organization within the chamber, one which is liable to overshadow the chamber itself.

As long as the retail merchants carry the chamber forward without emphasis on their own interests, there is no thought of a problem, but as soon as there is trade activity under the sub-heading of retail merchants, there is said to be a "serious" problem, regardless of the fact that the local chamber wields at the same time a large general influence which the merchants help create and make more potent.

### All for a common purpose

TOO much consideration has been given to what is deemed to be an overshadowing effect, and a consequent serious organization problem. The chamber draws together all kinds of groups or interests which have a common purpose, namely the upbuilding of a city, but no one of these groups could legitimately object to the special activities of the other group, whether they be few or many. Moreover retail merchants operating under their own name through a retail division, will not only strengthen the chamber's program but should make it easier for the chamber to obtain members from industrial, civic and professional classes.

Whether the city is large or small, there is everything to be gained and nothing to be lost by giving full rein to the retail merchants in developing their trade interests. Any "overshadowing effect" is nothing more than potential activity which can be capitalized by both the retail merchants and the chamber of commerce.



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# WHAT I'VE BEEN READING

By WILLIAM FEATHER

**R**EADING this month has been done in chair cars and hotel rooms. During the month the stock market occupied the front pages of newspapers, and absorbed all conversation. In some ways books seemed less important; in other ways more important.

As I observed stocks sink far below their former values, I sought to distract my mind, and books offered the simplest way of escaping an unpleasant subject. It occurred to me at that time, as it has on many other occasions, that if I had to choose between the enjoyment of books and the ownership of a thick portfolio of securities, I should choose to be a reader.

Dividends can be stopped, and stocks can fall to a fraction of their one-time price, but the joy to be obtained from literature cannot be taken away. I spent happy hours with books when I was making \$25 a week, and whether I make a million before I die or go back to the old salary, it will make no difference to the part of the day that I spend in reading.

That is the important feature of what is sometimes called culture. The man who has learned to appreciate the arts and the outdoors, and other pleasures that are free to those who can understand and enjoy them, has assets that outweigh the banker's appraisal of his net worth.

LET NOT the foregoing be construed as the after-the-event philosophy of a sold-out bull, suddenly turned pessimistic. The market grazed me, but it didn't slay me, and as I write this I am as confident and enthusiastic as ever about the great adventure of American business, and the materialistic progress of the United States.

Yet in the lull between the bull market that has ended and the new climb that will soon begin, I think that all men will be wise if they cast up the values of life and determine whether they wish to endow their children with a sheaf of securities, or an interest in living that can be satisfied even though

war and pestilence should rob them of every nickel of invested capital.

ON A fast luxurious train between Cleveland and New York recently a passenger complained that the air had been close during the night.

In 1866 Ralph Waldo Emerson, always frail, traveled about the country and endured the hardships entailed by long buggy rides, crossings of ice-filled streams, and primitive hotels. He slept on the decks of canal boats, amid a "wreath" of legs, taking three days for the journey from Philadelphia to Pittsburgh. He probably complained less than travelers today, not because his disposition was serene but because he expected discomfort and was willing to bear necessary indignities in order to make a living.

Throughout his life Emerson ate pie for breakfast. He was ever threatened by tuberculosis, and his first wife and many New England friends died from this disease, yet he lived to the ripe age of 79.

In 1855 he wrote in his Journal:

"I trust a great deal to common fame, as we all must. If a man has good corn, or wood, or board, or pigs, to sell, or can make better chairs, knives, crucibles, or church organs, than anybody else, you will find a broad, hard-beaten road to his house, though it be in the woods."

This has become one of the most misquoted paragraphs in literature, due to an error of Elbert Hubbard, who offered the same idea in the version, "If a man makes better mouse-traps," etc. Hubbard credited the paragraph to Emerson, but quoted it incorrectly.

These notes about Emerson are from "Emerson, the Wisest American," by Phillips Russell. Admirers of the great philosopher will find revealed in this biography a type of American that might easily be considered an ineffective if he were living today. He was not entirely understood nor accepted in his own lifetime, but his generation perceived that he was endowed with genius.

*Emerson, the Wisest American*, by Phillips Russell. Brentano's, New York. \$5.

When he lectured in a western town, however, and cut his speech short to catch a train, the people protested, although the tickets were only 25 cents.

This was the man who wrote "Self-Reliance," the most noted of all his essays, which has been printed by the millions. In it appear sentences that have become part of American thought. For example:

"To be great is to be misunderstood."

"A foolish consistency is the hobgoblin of little minds."

"Speak your latent conviction and it shall be the universal sense."

"In every work of genius we recognize our own rejected thoughts."

"All history resolves itself into the biography of a few stout and earnest men."

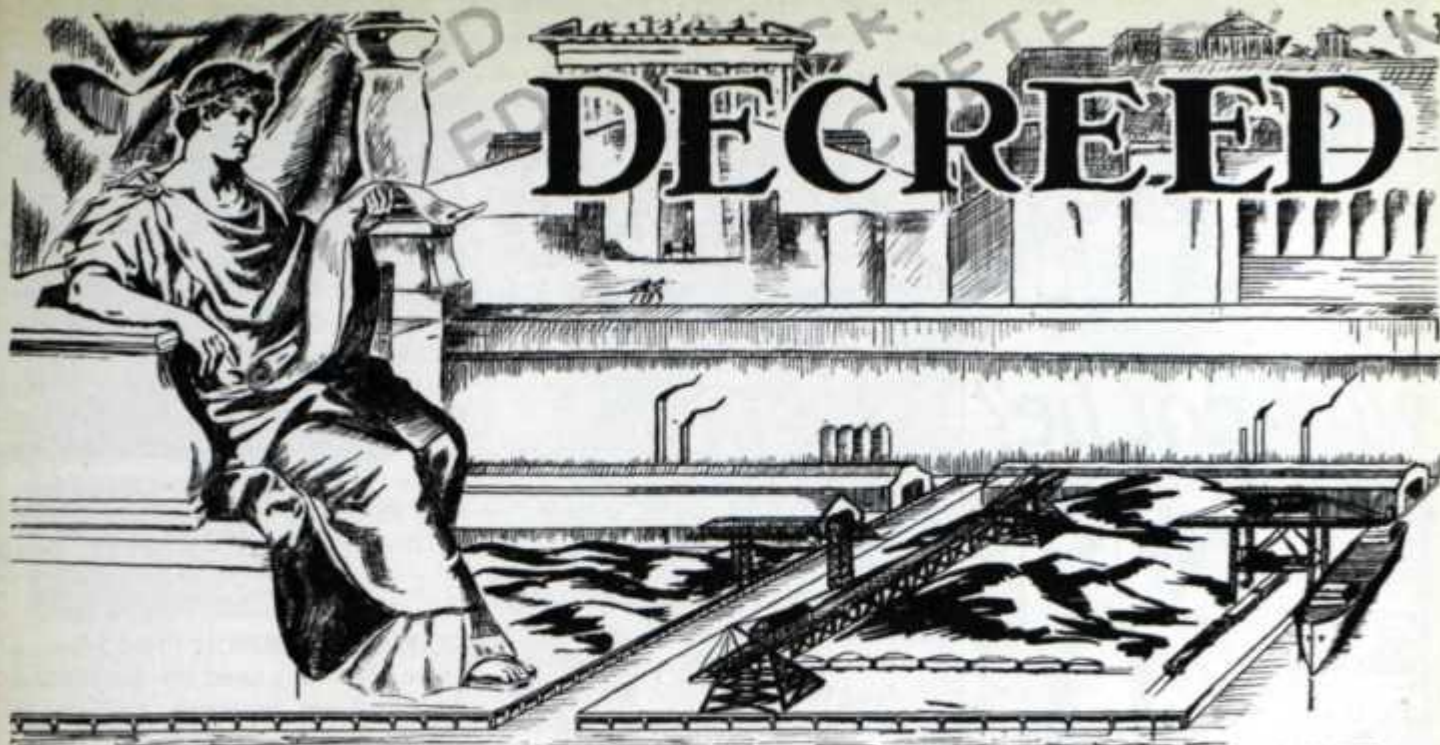
To appreciate the force of these sentences, it is necessary to understand the standards of American life and thought at the time they were uttered. The author of the biography supplies this background admirably, and so proves Emerson's own saying that the best way to read history is in the form of biography.

KENNETH GOODE believes that knowledge is power. He sees millions of dollars of profit for American business in knowing what people want, how they want it, when they want it. He pleads with American business men to cease depending on hunches and hit-or-miss methods of advertising and selling, and to substitute the testing method. Make what people want at a price they are willing to pay, and you will cease to be baffled by selling problems and profitless prosperity.

What kind of soap do housewives prefer? White, yellow, hard, soft, strong, weak, powder, or liquid? Why not ask them? The preferences of a hundred, or at the most a thousand, will supply the answer. It appears that women prefer soap that keeps their hands white and smooth, so that they will look like ladies who never touch dirty dishes.

"Hard selling doesn't pay," says Goode. "High sales costs are a sign of





## .... By the WISDOM of BUILDERS and the JUDGEMENT of COURTS

**G**OOD DOCK ENGINEERS are not pig-headed. When an investment of hundreds of thousands is involved, real engineering genius dictates that the dock of superior strength, economy and endurance must be built—patent or no patent. ¶ The payment of royalties is no longer debatable in the mind of the wise builder when it means better docks at lower cost. The Federal Courts

in repeated decisions have decreed that the Ferguson Patent on REINFORCED CONCRETE DOCKS must be respected. ¶ Keep your dock program abreast of modern engineering progress. Read this ever-increasing Ferguson REINFORCED CONCRETE DOCK ROLL-CALL. Then make the one ultimate and inevitable move of wisdom by adding your name to this list of leaders, now.

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Chicago & Northwestern Ry. Co.  
Grasselli Chemical Company  
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Winkworth Fuel & Supply Co.  
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Lake Superior & Ishpeming R. R. Co.  
The M. A. Hanna Co.  
City of Cleveland  
C. & B. Transit Co.  
State of California  
City of Houston, Texas  
Kelley Island Lime & Transport Co.

Central West Coal Co.  
Bethlehem Steel Co.  
Standard Oil Co. of New Jersey  
Sun Shipbuilding Co.  
Virginia Shipbuilding Corporation  
Peerless-Egyptian Cement Co.  
City of Wyandotte, Mich.  
A. J. Dupuis Co., Detroit, Mich.  
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Havana Docks Corporation  
City of Norfolk  
Detroit Iron and Steel Co.  
The Cleveland Cliffs Iron Co.  
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Gulf Refining Co.  
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Anaconda Copper Co.  
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Staten Island Shipbuilding Co.  
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Edward W. Bissell Estate, Detroit, Mich.  
Chester Shipbuilding & Dry Dock Co.  
Baltimore Dry Dock & Steamship Co.  
Sanford & Brooks Co. of Baltimore, Md.  
Graton Iron Works Co., Groton, Conn.  
Michigan Ammonia Works of Detroit  
Consolidated G. & E. Co. of Baltimore

## THE DOCK & TERMINAL ENGINEERING COMPANY

1248 WALNUT STREET

Consulting Engineers  
GAYLORD W. FEAGA, President

CLEVELAND, OHIO



# If she is efficient —



# why not he?



**S**MILE—if you wish—at the mid-victorian bookkeeper and his quill pen as compared with an up-to-date adding machine. But the scrub woman and her pail are just as slow and inefficient, compared with the Finnell Electric way to scrub, wax and polish floors.

The FINNELL pays for itself in time and labor saved. It yields an added profit in improved employee morale and public esteem, in decreased accidents and spoilage.

*Household Model. Light, easy to handle. Refinishes home floors.*



Write for Booklet, stating whether interested in models for business or home. Address FINNELL SYSTEM, Inc., 401 East Street, Elkhart, Ind., or 130 Sparks Street, Ottawa, Canada. Branches in London and Stockholm.

## FINNELL

### ELECTRIC FLOOR MACHINE

*It waxes • It polishes • It scrubs*



More than just a machine—FINNELL is a system. Eight models—enabling selection to fit your needs. For all business buildings or institutions.

hard selling. High selling expense is like fever in a patient. Or an overheated engine.

It shows something wrong. It costs something to "sell" any man even the thing he wants most: sampling crews find it costs \$1 properly to place a 35-cent can of baking powder. But healthy selling shouldn't cost too much. A sales expense over 30 per cent indicates, in some degree, one or more of these faults:

1. Wrong article
2. Too high price
3. Faulty presentation
4. Badly selected prospects
5. Overextended market
6. Waste in sales organization"

"How to Turn People Into Gold" is a book for all business men, particularly small business men, who usually are managing small businesses because they have not mastered principles that were discovered by operators of chain stores and chain theaters a decade ago.

The important rule to understand is that business exists for the service of customers. Unless a business truly serves its customers it has no excuse for existence, and will soon be closed. The business man who strives to be the representative of his customers, their purchasing agent or their manufacturer, and who conducts his enterprise on this basis, will enjoy prosperity just as long as there are people in the world.

I ORDERED a copy of "New Levels in the Stock Market" before the market broke, and read it after the crash. The publication of this book almost coincided with the break, so when I opened it, I wondered if another prophet had been crucified.

The author, Dr. Charles A. Dice, is professor of business organization at Ohio State University. I recommend his study to owners of securities who may be discouraged by the immediate outlook.

Dr. Dice anticipated the break that has been realized. On page 69, he says, "If history repeats itself, after the present boom has spent its energy we shall have a major liquidation period carrying the industrials averages down about 50 per cent from the heights attained."

In the break Dr. Dice predicted a low of 200. On November 13 the low was 198.69 (Dow-Jones).

"How to Turn People Into Gold," by Kenneth M. Goode. Harper & Brothers, New York. \$3.50.

"New Levels in the Stock Market," by Charles Amos Dice. McGraw-Hill Book Company, Inc. \$2.50.

What will happen now? Dr. Dice suggests that if history repeats itself, stocks will again climb to the old level, followed by a plunge to a low above that of November.

His point is that we are to see permanently higher levels. Future lows will be well above 200, just as the present low is well above the lows of the past.

The book is a reiteration of what has been repeated by innumerable prognosticators of a new day. Despite the wreckage caused by the extravagance of the recent bull market, the contention that American corporations are in a new era seems sound, and it does not appear that security-holders of well-managed companies need fear the future.

GEORGE HARRISON PHELPS is an active advertising agent who has handled appropriations of many millions of dollars. In his book "Tomorrow's Advertisers," he predicts that future expenditures will dwarf today's. He visions the time when a great advertiser will talk to all the people of every country in the world. He will use both television and radio, and may possibly announce the inauguration of world-wide air transportation. The price of this ten-minute speech may be \$650,000.

Phelps' comments are entertaining and stimulating. The book is sketchy and the style is choppy, but paragraphs here and there are exciting and provocative. Experienced advertisers and writers will find it worth reading. I should not recommend it to beginners.

IS your son cut out for a detective, a newspaperman, a congressman, a printer, an archaeologist, a professor, or what? Would it be wise to promote the shipping clerk to the sales department?

Rutherford Platt has compiled a group of questions which will supply an answer. The purpose of this book is more serious than the usual parlor game volumes. From tests I made, I judge that it has merit.

You are supposed to answer the questions blindly, not knowing the underlying purpose of the groups. A summary of your answers provides a key to your preferences. By turning to the proper "Answer" in the back of the book you learn about yourself. Many jobs are suggested for each type.

"Tomorrow's Advertisers," by George Harrison Phelps. Harper & Brothers, New York. \$3.50.

"You Can't Fail," by Rutherford Platt. G. P. Putnam's Sons, New York. \$1.50.



T O E V E R Y W H E R E I N C A N A D A



## America's LARGEST RAILWAY *is ever expanding*

*"A railroad is never finished. It must be self-competitive, fighting for new life, new business, new progress, new knowledge and vision."*

SIR HENRY W. THORNTON  
CHAIRMAN AND PRESIDENT,  
CANADIAN NATIONAL RAILWAYS.

THE largest railway system on this continent is Canadian National Railways. It is the very nerve and blood and sinew of a great Dominion. It is never finished because it is always growing. It is alive with enterprise and purpose, pushing forward always to new achievement, like the country of which it is a part.

Its 23,000 miles of tracks extend from great cities of the United States to everywhere in Canada, join Atlantic to Pacific and reach to the shores of Hudson Bay.

Canadian National is not only the largest railway in America—it serves every phase of travel and communication. It operates

magnificent hotels, vacation resorts, hunting and fishing camps, steamships on two oceans, a telegraph system, radio stations, and express service. It has more than 100,000 employees.

For five years passengers on Canadian National crack trains have enjoyed radio service. Tomorrow they may have telephone connection on moving trains with home and office: already it has been accomplished.

Tomorrow the shining steel of the Canadian National network will give new life and find new wealth across far country which today seems only a wilderness.

Maximum of luxury and efficiency are the standard throughout the Canadian National system. Tomorrow these maximums will be superseded by new achievements—finer, better, greater.

Truly it is said—America's largest railway system is ever expanding.

# CANADIAN NATIONAL

THE LARGEST RAILWAY SYSTEM IN AMERICA

BOSTON  
558 Washington St.  
BUFFALO  
430 Main St.  
CHICAGO  
4 E. Michigan Ave.

CINCINNATI  
45 E. Fourth St.  
CLEVELAND  
910 Euclid Ave.  
DETROIT  
1225 Washington Blvd.

DULUTH  
435 W. Superior St.  
KANSAS CITY  
105 Walnut St.  
LOS ANGELES  
827 So. Grand Ave.

MINNEAPOLIS  
510 Second Ave. S.  
NEW YORK  
405 Fifth Ave.

PHILADELPHIA  
1422 Chestnut St.  
PITTSBURGH  
310 Fifth Avenue  
PORTLAND, ME.  
Grand Trunk Bldg.

PORTLAND, ORE.  
302 Yamhill St.  
ST. LOUIS  
314 No. Broadway  
ST. PAUL  
35 East Fifth Street

SAN FRANCISCO  
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1325 Fourth Avenue  
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When writing to Canadian National Railways please mention Nation's Business



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**USE PHOTOGRAPHS** to conquer cut-price competition. Your product costs more because it's worth more. Let the camera create convincing proof of quality. A buyer may question a salesman's word; but photographs always inspire faith. And faith moves merchandise. To make your personal selling and your printed selling more effective, turn to photographs. They build believability—and business.

Two booklets worth reading! "How to Use Photographs in Your Business"—and "The 4000-Mile Lens" describing how to get distant photographs by wire through our unique service. For a free copy of both booklets, address Photographers' Association of America, 2258 Euclid Avenue, Cleveland.



# PHOTOGRAPHS

## TELL THE TRUTH

When writing to PHOTOGRAPHERS' ASSOCIATION please mention Nation's Business

## What Will Radio Do For Us?

(Continued from page 38)

signs but also in further refinement of existing types.

I often feel that, although radio reproduction has made remarkable strides, there is still ample room for improvement. If we compare the reproduction with the original, whether it be voice, band or organ, we are immediately aware of the wide discrepancy.

The unemotional sound analyzer of the laboratory tells us definitely, in quantitative terms, just how far removed our loud-speakers are from the original sounds—and you may be certain there is ample room for improvement.

In the matter of efficiency, rather than tone quality, our present loud-speakers are notoriously weak. Only a minute fraction of the electrical input is converted into the mechanical energy that sets up air waves which we call sound. The greatest obstacle in the way of a practical battery set is the inefficiency of the loud-speaker, which now requires too much input for satisfactory battery operation. However, many brilliant minds are at work on the problem.

### New battery sets in prospect

WONDERFUL battery-type radio sets are bound to appear in the near future, for the many unwired homes in city and country alike. The battery set is by no means obsolete. It has merely halted to catch its technical breath in preparation for a greater forward spurt.

No one can review the rapid progress of transoceanic radio during the past decade without accepting radio as a positive, economical and logical means of long-distance communication.

Radio, particularly the short-wave, moderate power radio circuit, is a competitor of telegraph lines as well as cables, but only to a moderate degree. The recent battles for short-wave licenses waged by various radio and telegraph interests in the United States, must serve as ample evidence of the confidence in the future of radio links between important centers. It is possible that some day the radio circuits will compete with telegraph lines, but I am more inclined to believe the latter need fear no such competition.

Rather, the radio communication companies, heretofore forced to depend on telegraph lines owned by their cable competitors, are operating at a marked disadvantage. It is only natural and



The dots on this map show the hundreds of places where we have done engineering or construction work. They are an indication of our wide knowledge of labor and material markets and long experience in building under the varying conditions obtaining in different sections of the United States and other parts of the world.



# World-wide construction experience

*... represented by a billion dollars worth of work*

## UNITED ENGINEERS & CONSTRUCTORS, INC.

### combining

The U. G. I. Contracting Co.  
Public Service Production Co.  
Dwight P. Robinson & Co., Inc.  
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Engineering & Construction Co.  
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Dwight P. Robinson & Company  
of Argentina, Inc.  
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### Specialists in the design and construction of

Industrial Plants, Steel Mills,  
Power Developments, Railroad  
Work, Gas Plants. Construction  
of Apartments, Hotels, Office  
Buildings.

THE example of President Hoover in pushing the immediate construction of great public works is being followed by manufacturers, railroads, public utilities and institutions everywhere.

New facilities—shops, factory extensions, railway terminals, power developments, electrification, foreign branch plants—are being immediately projected.

In connection with this national building program the services of this company are available to American industry.

Our experience is indicated by a billion dollars worth of work performed for 1200 clients located in practically every state in the Union, seven Canadian provinces and 12 foreign countries.

Through our offices strategically placed in five principal cities in this country and through our three foreign companies we are prepared to handle construction undertakings anywhere in the world.

## UNITED ENGINEERS & CONSTRUCTORS

INCORPORATED

DWIGHT P. ROBINSON, PRESIDENT

PHILADELPHIA  
LOS ANGELES

NEW YORK  
BUENOS AIRES

NEWARK  
RIO DE JANEIRO

CHICAGO  
MONTREAL

**MAXIMUM RETURN TO CLIENTS PER DOLLAR INVESTED**





## Heresy then, Business now

A FEW short centuries ago, they burned people at the stake for things less serious than trying to change the weather.

Modern science has shown Business how to make its own indoor weather—thereby promoting the health and efficiency of the worker—speeding and improving production processes—making homes more livable.

Heating, ventilating and air-conditioning have made their greatest strides during the past few years.

Visit this outstanding event—See for yourself how modern homes, offices, mills, mines and factories should be heated, ventilated, and air conditioned. Talk to specialists who will be in attendance. Keep step with progress! January 27th to 31st inclusive, at the Commercial Museum, Philadelphia, is your opportunity to examine, compare and select the newest and best for your particular needs. Remember the date. Don't miss it!

### INTERNATIONAL HEATING & VENTILATING EXPOSITION

*Under Auspices American Society  
Heating & Ventilating Engineers*

**Commercial Museum  
Philadelphia**

**January 27 to 31, 1930**



Management International Exposition Co.,  
Largest Industrial Exposition Organization  
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*When writing please mention Nation's Business*

just that they should seek short-wave links between the terminals of the transoceanic circuits and the many business centers of the nation. Otherwise, the radio companies are under an enormous and even insurmountable handicap.

Originally, we looked upon the short waves as presenting an enormous and practically unlimited field for future radio communication. But even now, the short-wave band is becoming crowded. Space is at a premium, although there is much room in sight, once a satisfactory technique has been worked out for still shorter wave lengths. The main consideration now is to utilize the existing short-wave band to the best advantage. This can be done by such methods as directive transmission and reception, multiplex operation of single radio circuits, and perhaps new methods of wave propagation and reception.

### Radio's greatest opportunity

I BELIEVE, however, that the main field of radio is in transoceanic work and even transcontinental work rather than in intercity communication, in which field wire lines are satisfactory.

It must be possible, ultimately, to employ a single short-wave channel for several simultaneous functions, such as telegraph, telephone and facsimile communications. By improved methods of synchronizing two transmitters so that their carrier frequencies may be exactly matched to eliminate the interference, and having two distinct audio pitches or frequencies, it should be possible to double the number of short-wave transmitters. Indeed, the number might be multiplied many fold.

While the trans-Atlantic telephone service is in daily use, connecting American telephone subscribers with those in many European countries, I do not look ahead to any extensive use of the

radio telephone in competition with telephone lines. The radio telephone can serve in spanning vast distances over water, since submarine cable telephony has not been feasible for distances greater than a hundred miles or so. It can serve also in spanning variable distances, such as those between airplane and ground, railway train and stations, and so on. I believe that eventually all ships, railway trains, aircraft and other passenger vehicles will be able to establish communication with any telephone subscriber by radio telephone. The principles are established today. It is just a question of economics.

In the field of aviation, radio is bound to play a leading part. Today we have the early indications of this important partnership, in the form of the first two-way radio telephone circuits experimentally established between plane and telephone system, radio beacons, radio storm warnings to pilots, the radio direction finder aboard aircraft, the radio telephone and telegraph apparatus for aircraft use, and so on.

And with all I have already mentioned, I still believe the story of radio's future is far from complete. There are so many fields to which radio technique can be applied—in geology for locating mineral deposits; in industry for refining rare metals in vacuum induction furnaces; in medicine perhaps, because of the peculiar curative properties of certain high frequencies; in surgery because of the proved value of the radio knife, which sears its way through flesh, cauterizing as it goes; in fine measurement work in the laboratory; and so on and so on.

Indeed, no man can prophesy the future of radio with any degree of success. It is just a wild guess—and that is precisely what I have attempted to do, perhaps much too mildly despite my avowed intention of being rash.

## A Reply to Mr. Flagler

*(Continued from page 50)*

timate effect, as the client views it, is deliberately sought after regardless of cost.

The Cathedral of St. John the Divine could be cheapened by millions if the framing were considered as purely an engineering problem, not an architectural one.

One of the axioms of design for a quarter of a century to my own knowledge, and I do not know how much longer, is that good architectural design and logical structural elements are so

closely interwoven as to defy separation. The structure is the bony skeleton, the design is the flesh and blood. The successful result is the body fitted and fashioned to its uses, comely in appearance, graceful or rugged in outline as its duties may dictate.

As to what Mr. Flagler designates finally as the kernel of the reason for the disorganization of the constructive industry (as he calls it)—the belief of many architects and most owners that they can save money by dealing with ir-



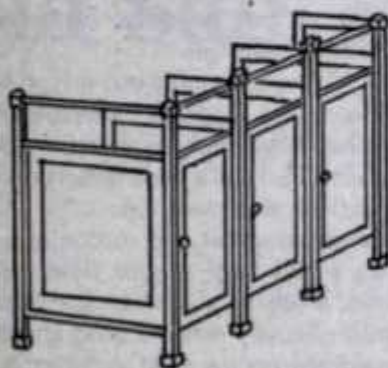


At the Olympia Arena in Detroit



# Skating Yesterday—Boxing Tonight

Without a drop of Condensation from its insulated steel-decked roof



Steel Toilet Partitions

Steel Toilet Partitions are absolutely sanitary, neat, permanent. They save money and speed up construction.



Steel Buildings

Standardized Steel Buildings save time, labor and expense; are fire resistant, durable and inexpensive to maintain.

**H**ERE is a striking example of steel roof deck performance, demonstrating the total absence of condensation under extreme temperature changes.

In the short space of twenty hours this vast hall was changed from the winter temperature of an ice skating rink to the 70 degrees of the boxing arena. Upon examination, the under side of the insulated steel roof deck was found to be bone dry. Questioning the heating engineer in charge, revealed that his equipment operated at only 50% of its capacity to bring about this temperature change.

In addition to its features of non-condensation and prevention of heat loss with an attendant saving in fuel and heating equipment, steel roof decking offers splendid fire protection, is durable and easily erected. Where the under surface of the roof is used as a ceiling, the painted steel roof deck presents a neat appearance and is an effective light reflector.

## Get the Facts of "Saving With Steel"

Details and specifications on steel roof decks, or any other products manufactured of flat rolled sheet and strip steel in which you are interested, will be furnished upon writing to Trade Research Division, National Association of Flat Rolled Steel Manufacturers, Terminal Tower Building, Cleveland, Ohio.

# Save Labor Fire Money with Steel





## To Judge a Stock

One must ask, not only what does it earn? But do those earnings include a *correct* reflection of property deterioration and obsolescence, a *correct* accounting for property additions, deductions, alterations, renewals and repairs? The facts are supplied by American Appraisal Service.

### THE AMERICAN APPRAISAL COMPANY

New York • Chicago • Milwaukee  
and Principal Cities

A NATIONAL ORGANIZATION

## Hotel SYRACUSE

SYRACUSE, N. Y.



WHATEVER it is you can sell it, buy it or have it made in Syracuse. Your headquarters will, of course, be Hotel Syracuse. 600 outside rooms, each with bath, \$3.00 up.

ROY P. BRAINARD, Managing Director

POWERS HOTEL • ROCHESTER, N.Y.  
\*\*\* Under Same Management \*\*\*



### You can't expect Government to be a Santa Claus

and then kick when an imaginary benefaction of Government comes back to you in increased taxes, says Samuel Dunn, editor of "Railway Age" in an article for the

February

NATION'S  
BUSINESS



responsible contractors—it is to be regretted that he did not get immediately to the kernel without dressing it in so much hull.

He practically admits that most architects agree with him as to the dangers and fallacies of such practices. But he dulls the point of his very sound and salutary arguments about the advisability of dealing only with reputable builders by a series of sweeping attacks on technical practices which are likely to do great harm to an army of highly trained and, usually, pitifully underpaid practicing architects.

### He belittles supervision

NOT satisfied with this, he attempts to belittle the supervision which architects are supposed to be employed to give to buildings they plan. Here again his illustration is trifling.

It seems that his concern employed an engineer in a minor capacity for a month, and discharged him as incompetent. Then his firm was shocked, it seems, because the same man got a job as supervisor for the architect on the identical job!

I might be mean enough to suggest that perhaps that young man's discharge by the builder nominated him to the architect as a good one to put on the watch. What probably happened is something like this.

The young engineer had a type of experience that made him valuable to the architect but not so valuable to the builder. There is a wide difference, both in outlook and execution.

Many practical and successful architects would have a hard time holding down a job in a contractor's office. A builder usually makes a good architect's superintendent. A good architect or engineer does not always make a good practical builder.

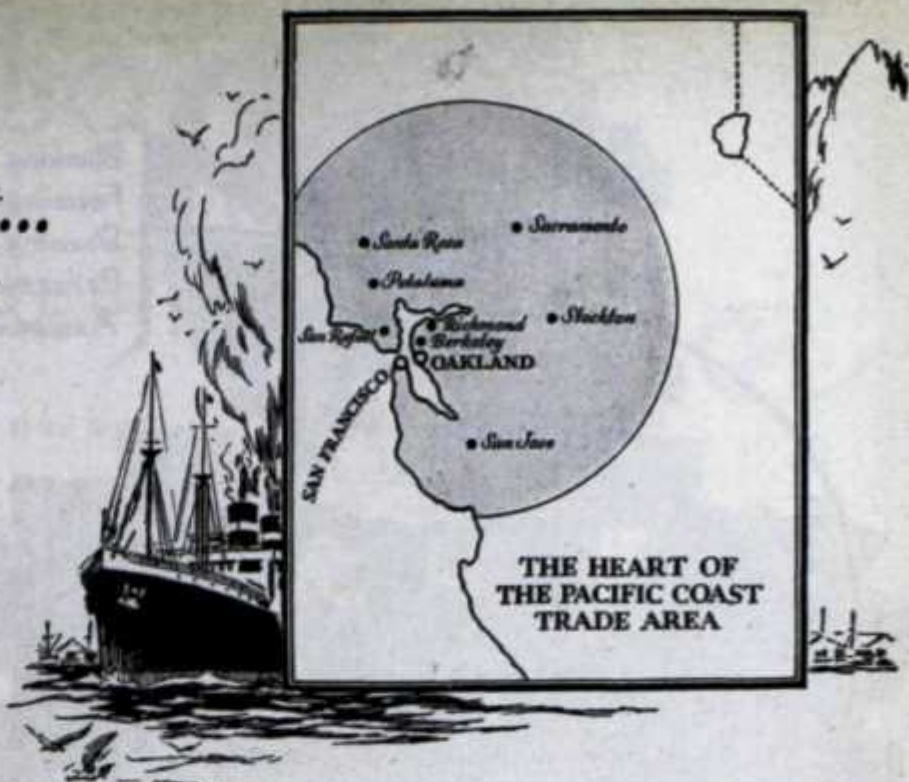
### How evils can be corrected

MR. FLAGLER concludes by asking when will the evils of the building industry be corrected. He answers by saying it will be done when the building public abandons the idea of getting something for nothing. True enough.

But the building public will probably not abandon that idea as long as it believes that architects are usually impractical dubs, and that builders more often than not are irresponsible crooks. Neither of these things is true, but the tendency of Mr. Flagler's article is, in my opinion, calculated to confirm that impression.



*to serve South American Markets*



*Natural Gas*  
now available for industries  
in San Francisco Bay area  
.... *a new and cheaper fuel*

Here the railroads of the country meet the ships of the Pacific. Good roads aid in quick deliveries; an abundance of cheap electric power reduces production costs; plant investments are low; production is increased through efficient labor and suitable climatic conditions. Here is where industries are locating to serve the ever-growing western markets.

**THE SAN FRANCISCO METROPOLITAN BAY AREA** now offers a further inducement for industrial development, for the Pacific Gas and Electric Company has an abundance of natural gas at attractive low rates. This Company will place industrial engineers at your disposal. Facts applied to your specific plant will be presented promptly and confidentially to your executives.

Send for a copy of  
"Outstanding Features of the P. G. and E."

## PACIFIC GAS AND ELECTRIC COMPANY

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**Serving 349 Communities in Northern and Central California**

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Forming  
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### Our Modern Plant Can Make the Heaviest Stampings



Truscon Skid  
Platforms, Steel  
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reduce the cost of  
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Truscon is an outstanding factor in the Pressed Steel Industry by reason of modern production methods which entitle its customers to all benefits of economy, quality, accuracy and speed. The tremendous facilities for the production of pressed steel parts can be used to supplement your own plant. We want to co-operate with you to the extent of developing or creating pressed steel products that become integral parts of your finished product. Our designers are experienced, competent and ready to serve. Your inquiries are requested.

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*When writing to TRUSCON STEEL COMPANY please mention Nation's Business*

### How and Where Will Our Children Live?

(Continued from page 43)

communities others. Rather definite distinctions between these three classes can be drawn. But a reasonable articulation of the different types of open spaces, will provide the people of the United States with opportunities for outdoor life which will act as an effective leverage for raising cultural standards.

Perhaps density and distribution of population in great metropolitan regions offer the most vital problem of urban occupation.

The population predictions for the New York region, covering an area of some 5,500 square miles, including more than 400 incorporated and unincorporated communities, are that the nine million or ten million population of today will become 29 million by the year 2,000 and perhaps 35 million by the year 2,100. This will mean that the New York region will fill faster than the country as a whole until about 2,000 and after that at about the same rate.

#### People as thick as flies?

NO ONE will deny that the New York region has sufficient room for a population of 35 million. This would mean an average density of less than ten persons to an acre. But if the present tendencies to concentrate in New York City, Newark, and Hudson County continue, we should have ultimately a population of more than 54,000 persons per square mile of the metropolitan center or about 85 persons per acre.

But the decentralizing tendencies already at work promise a far better distribution of population within the New York region. Many industries will move into the suburbs or neighboring towns. Branch stores and owner-operated shops will bring merchandise to home neighborhoods. More families are moving each year further from the central congestion and the members of those families find increasing marketing and merchandise service near home.

The cost to society in loss of time, loss of comfort and loss of actual money through congestion due to overpopulation of the land, whether for day-time business or living quarters, is so apparent that no one can doubt that in self-protection urban governments will set up some standards regarding the load the land can carry.

In New York this has been accomplished in part by set-back laws which give light, air and sunshine to the upper



# 50 YEARS OF KEEPING PACE

... with the fastest pace-makers  
in the world



1880



Fifty years' experience results in a perfect Steel Filing Cabinet. Extra-capacity drawers roll out smoothly at a finger-touch. Each is equipped with a positive locking device. Very economical.



The modern Counter is made of Files. No more lost space. Steel Files keep facts right up front. Interchangeable, portable and adjustable. Brass-bound linoleum tops fit any installation.



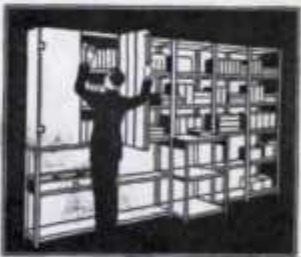
Before long your Desk, and all other desks, will be made of steel. Not just because steel is modern... it is more efficient. Strong and rigid, steel insures very low depreciation.



1930



"Y and E" Supplies guides, folders and form cards, speed up business. There is a ready-made "Y and E" System for almost every need, or we will design and create one for you.



"Y and E" Steel Shelving protects stock and avoids wastage. This saving alone pays the original cost. Open or closed shelving, with or without bins. Stands rigidly and independently.



"Y and E" Steel Storage Cabinets provide a place for everything. There is a type and model for every business, as well as for school or home use. Optional fittings and auto-type door locks.

WHEN business letters were written by hand, "Y and E" already was serving business. "Y and E" has continued to serve, through fifty years of the most exacting business demands the world has ever seen.

In fifty years American business has conquered a half-wild continent, turned a feeble glow into an electric light and converted the dream of a horseless carriage into 26,000,000 automobiles.

Genius like this demands good tools. And in every part of its production—from filing systems to desks—"Y and E" has set the pace.

"Foremost for Fifty Years" is no idle phrase with "Y and E". We had to be foremost to show the way in the great American business age. You can buy a "Y and E" filing cabinet, desk or filing system with the positive assurance that it has been successfully tested by men who demand the best.



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# NO SHIVERING WINTERS ..... NO SWELTERING SUMMERS ...

## *In Chicago's Marshall Field Garden Apartments*

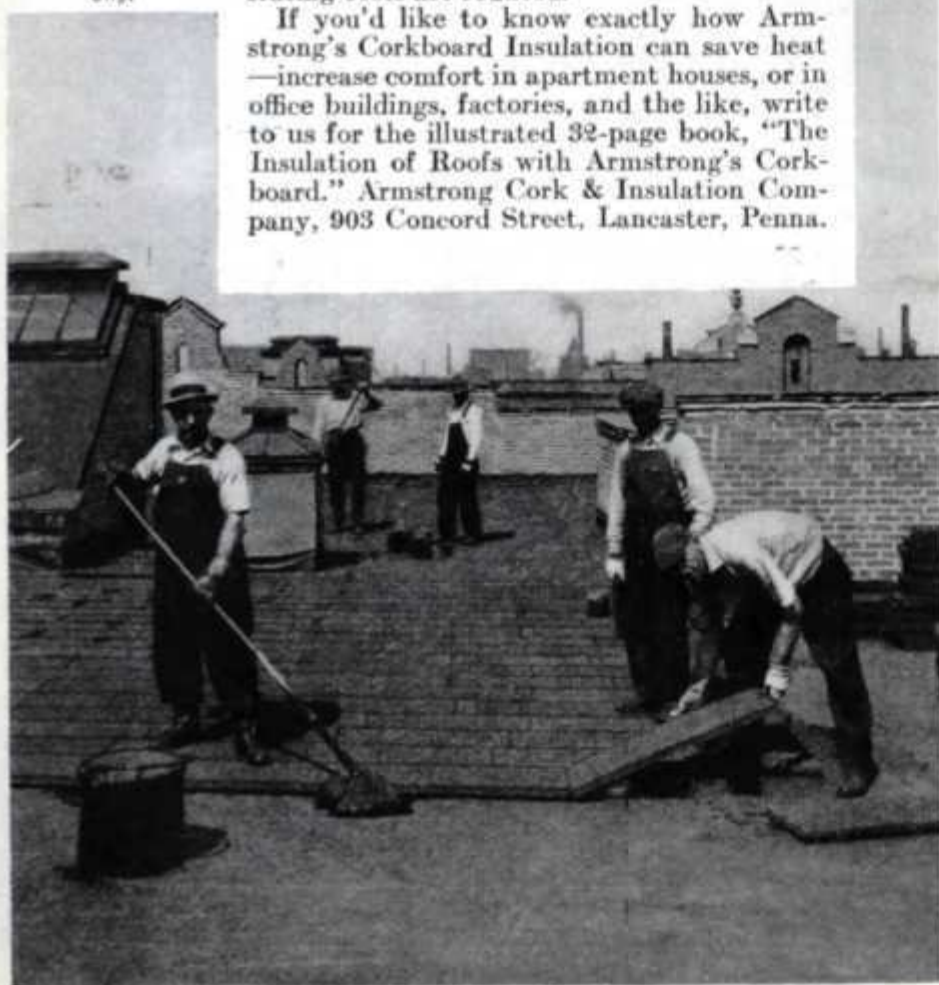
**E**VEN top-floor rooms are comfortable, winter and summer, in the Marshall Field Garden Apartments. That's because the ten apartment units, covering two city blocks in the heart of Chicago, have roofs that are insulated with Armstrong's Corkboard.

Armstrong's Corkboard makes roofs so nearly heatproof that the rooms below are protected from outside temperatures. Such protection is not possible without insulation or with too little. Only an adequate thickness of Armstrong's Corkboard assures top floor tenants saying: "Our rooms are always comfortable."

That isn't all. The furnace warmth that once escaped through the roof to the great outdoors now heats these top floors efficiently. No more emergency calls for "heat for the top floor." No more strain on the heating system. Best of all, fuel bills are held down, operating costs are reduced.

If you'd like to know exactly how Armstrong's Corkboard Insulation can save heat—increase comfort in apartment houses, or in office buildings, factories, and the like, write to us for the illustrated 32-page book, "The Insulation of Roofs with Armstrong's Corkboard." Armstrong Cork & Insulation Company, 903 Concord Street, Lancaster, Penna.

*Workmen laying part of the 100,000 sq. ft. of Armstrong's Corkboard on Marshall Field Garden Apartments, Chicago, Ill.; architect, Andrew J. Thomas, New York City.*



# Armstrong's Corkboard Insulation

FOR THE ROOFS OF ALL KINDS OF BUILDINGS

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stories of skyscrapers and to some extent limit the population per acre. But this is not enough. In the future there will certainly be some required relation between the amount of open space and the capacity of the buildings erected on given areas. One skyscraper can be, and often is, architecturally effective. But solid masses of skyscrapers destroy architectural effectiveness and overload the land. There is not a city in the United States where, if all the land zoned for high buildings were actually occupied by buildings of the legal limit, the resulting congestion would not be intolerable.

Until we discover the principles which should govern the developments of urban land, the ratios between bulk and height of buildings and open spaces for circulation and recreation, we cannot be sure that we are building with any degree of permanency.

We need further studies in land classification and, above all, we need a national program which will coordinate the results of such classification surveys to the end of defining a gauge which may be applied by public officials and private individuals to aid in determining the best use of specific areas of nonurban land.

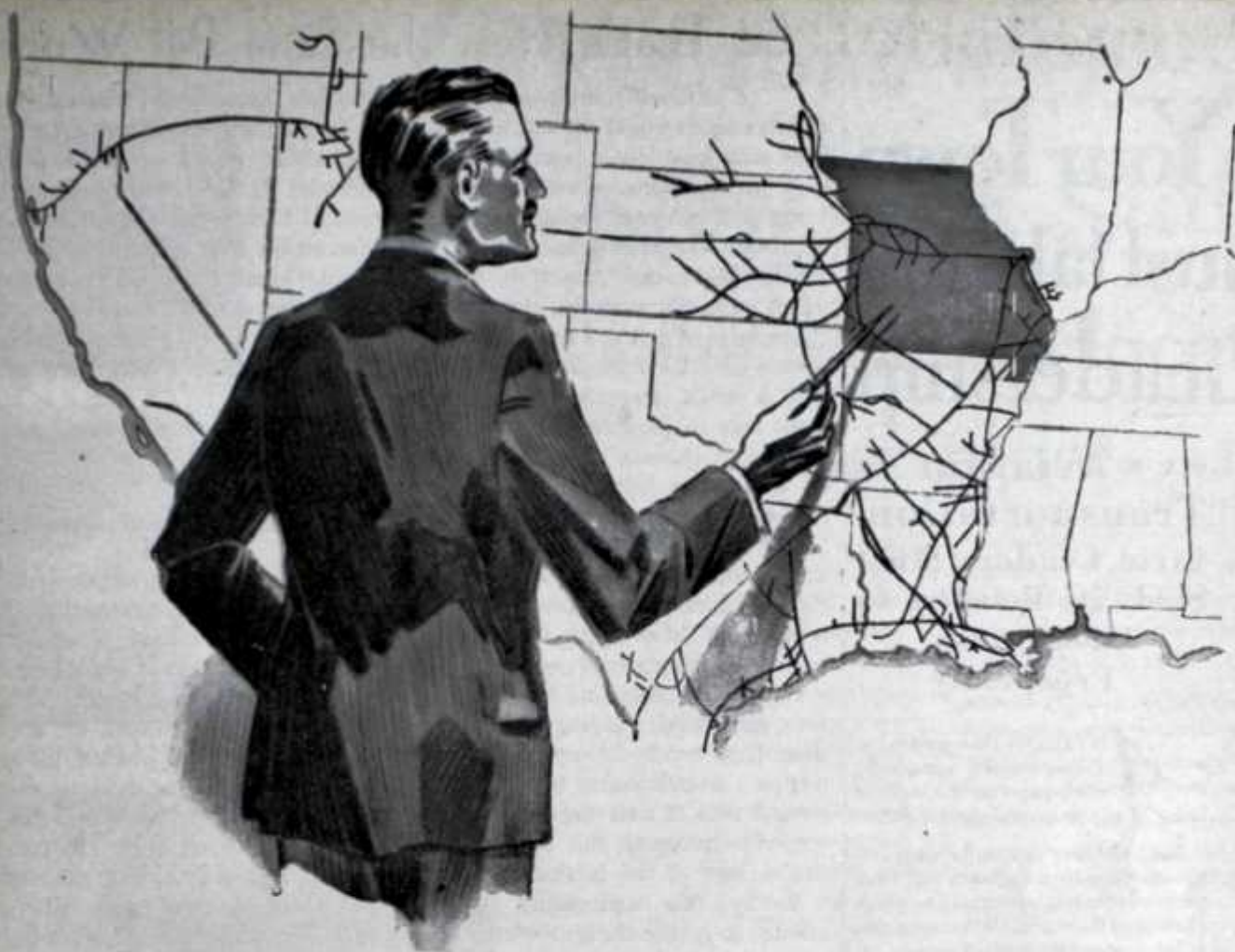
## **Land uses must be studied**

OUR Committee concluded that the available facts in regard to the major surface uses of land are not adequate to justify positive conclusions in all cases; but we could see that there are almost unlimited opportunities for promoting social progress by planning the use of our land resources in different sections from a national point of view.

"The first step in planning consists in making surveys in each area to find out how much of the land can be used advantageously to supply local market demands, how much, if any, can be used for crops that compete with more productive areas, what land ought to be left in forests or put into forests, what changes in taxation are necessary, and whether settlers can improve their standards of living by moving elsewhere, and if so, where."

There is now no agency to do this. The Department of Agriculture can make known many of the facts but is often powerless in the face of high-powered "promotion" methods. We believe that a central organization to carry on publicity, to assemble and interpret results of authoritative researches, and to broadcast information should be established as the first step in solving our problems of land-utilization.





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IN RECENT years more and more manufacturers have been asking Missouri to "show" them where they would profit by locating new or branch plants in that state . . . and the result has been highly satisfactory for both.

Missouri is especially well situated to "show" manufacturers who require supplies of metallic and non-metallic minerals, that it is good business for them to locate near the source of raw supplies.

This and its many other advantages . . . an adequate labor supply, low power costs, splendid transportation and nearness to markets . . . are all helping Missouri achieve a rapid industrial growth.

The Missouri Pacific Lines, prominently and helpfully identified with Missouri's growth and progress for 80 years, will be glad to tell manufacturers more about the manufacturing possibilities of the state.

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Director Industrial Development Department  
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## So That's How the Farm Bill Works

(Continued from page 29)

Board's funds would soon be exhausted. Few such loans have been made, however, in comparison with commodity loans and, before granting those it has approved, the Board has sent experts into the field to determine if the facilities asked were not available through purchase, lease or rent at a reasonable price.

Late in October the Board announced that it would thereafter grant facility loans only to cooperatives belonging to national or regional sales organizations, or when such loans would encourage the establishment of such sales agencies.

The amount of the loan depends upon the investment to be made. In any case the loan cannot be for more than 80 per cent of the value of the facilities. It is secured by the physical property.

Commodity loans are handled somewhat differently. Varying market conditions have made it impossible to announce a specific policy but the Board's general rule is that the loan must be used to "promote the effective merchandising" of the product concerned.

Briefly, the commodity loan is granted to permit the borrowing cooperative to advance its members a greater share of the market price of the commodity delivered to the association. It works like this.

### Loans on warehouse receipts

THE individual farmer delivers his crop, say wheat, to the cooperative of which he is a member. The cooperative puts his crop and the crops of its other members in a warehouse and offers the warehouse receipts to one of the 12 Intermediate Credit Banks as security for a loan. The money thus borrowed will be returned to the members as partial payment for their crop, the remainder to be paid when the crop is sold and expenses of the cooperative subtracted.

The Intermediate Credit Bank is permitted to lend up to 75 per cent of the market value of the crop on the date of delivery to the warehouse. After the loan is negotiated through the bank the cooperative association is entitled to apply to the Farm Board for a supplemental loan, usually of ten per cent, or an amount not to exceed one dollar a bushel for the combined loans.

In the recent stock market depression, however, the Farm Board felt that the decline in stock values had influenced the wheat market and made prices there

too low. Accordingly, it announced that it would grant supplemental loans based on wheat prices of \$1.13 a bushel, Seattle; \$1.25 a bushel, Minneapolis, and \$1.12 a bushel, Duluth. It took similar action with cotton, making supplemental loans up to 16 cents a pound.

The application then sets forth the amount of loans already advanced by the Intermediate Credit Bank or commercial banks on the crop it is marketing. It requests supplemental loans from the Board.

### Loans are well secured

THE applicant also agrees to deposit, with a designated Intermediate Credit Bank warehouse, receipts for a specific amount of his product and a promissory note, payable to the Board.

If the loan is granted, the applicant may withdraw the product pledged as security by repaying the loan, principal and interest. The applicant may also withdraw pledged wheat and substitute wheat of equal quality by permission of the Board. On the first and fifteenth of each month, the borrower must report in detail to the Board the total amount of its commodity on which the Intermediate Credit Bank has made loans and the number on which the bank has made a loan supplemented by a Board loan.

Thus the Board is able to keep a constant check on borrowers. It knows at all times how much of a commodity they have on hand and how long they have had it.

This serves as a check on hoarding as does the fact that commodity loans are made for the duration of the marketing season. As soon as a crop is marketed, the cooperatives must repay the loan.

Although the Board has been operating only a short time, several loans have already been repaid. Chairman Legge, of the Farm Board, wrote Senator McNary, October 2, that the Board had received applications for approximately 70 million dollars in commodity loans. Of this, 57 millions had been tentatively approved but only \$686,000 had been called for.

The Board is also authorized to lend money to farmer-owned and farmer-operated stabilization corporations. Cooperative associations handling a certain product may form these corporations which will have the power to handle any surplus of the product. So far no loans have been made to these corporations.



# 7 Reasons why New York State is the place to locate your plant



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ABUNDANT LABOR



POWER IS CHEAPER IN NEW YORK STATE

**1 CHEAP POWER.** In the territory served by Niagara Hudson Power, rates for electricity are materially lower than in the nation as a whole. The Niagara Hudson transmission system makes this cheap power available in even the smallest communities.

**2 LABOR.** This state has an unlimited supply of the highest-type skilled labor in the world—contented employees who live well and spend well. The manufacturing output per worker is higher than in almost any other state.

**3 POPULATION.** Surrounding New York State are 49 per cent of the nation's people and 55 per cent of the nation's wealth. Your distribution costs are low here.

**4 TRANSPORTATION.** The state is blanketed by 53 railway systems operating 8,400 miles of track, linked with 900 miles of navigable

waterways, 80,000 miles of concrete roads, and a harbor that handles half the imports and exports of the country.

**5 RAW MATERIALS.** Within the state, many important manufacturing materials are produced. But even more important is New York's inexpensive access to raw materials from Canada, from the West through the Great Lakes, and from abroad.

**6 CAPITAL.** New York has more money to invest than good things to invest in. In 1925 the state paid more than one-fourth the entire income and miscellaneous taxes collected by the Federal Government.

**7 CLIMATE.** Experience proves that employees do more work and better work where the average yearly temperature is about 50 degrees—as in New York State.

*For manufacturers who are interested, a detailed booklet, sent without a personal follow-up, is available. Write Industrial Development Bureau, Niagara Hudson Power Corporation, Albany, N. Y.*

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# What the World of Finance Talks Of

By MERRYLE STANLEY RUKEYSER

**A**S the economic soothsayers gaze into the crystal ball to learn the outlook for employment and profits in 1930, they will have to make allowance for a new and imponderable factor. The new ingredient in business is the gallant determination, articulated by President Hoover and accepted by business leaders, that the business cycle is not foreordained and inexorable, but can be modified by the coordinated efforts of groups of influential human beings.

Prophecy, always hazardous, becomes doubly so at this time, as a result of the introduction of a new and unpredictable factor into the business situation. Of course, if the philosophy behind the proposed Business Council is to prevail, business in the future will be more free from the melodramatic swings from prosperity to depression. The new aim of voluntary social control of the business mechanism is to keep business on an even keel, minimizing the fluctuations from normal. As a matter of fact, irrespective of these new picturesque attempts initiated by the Chief Executive and executed with the cooperation of trade associations under the leadership of the Chamber of Commerce of the United States, business has been gradually approaching a status of greater stability.

Improved efficiency in transportation, hand-to-mouth buying, scientific credit administration, better industrial relationships, the drift of business to an increasing extent into the sway of well-managed enterprises, and the improved economic data gathered not only by the Government but also by voluntary associations of business men have gradually been paving the way for the approaching era of greater stability and balance in business.

## A sign of our economic maturity

♦ IF this humane hope that business will become better stabilized is fulfilled, it will be a sign of America's coming of age in an economic sense. The violent transitions from booms to depressions represent hangovers from the primitive era in American business. As James

Speyer has pointed out, prosperity is now the normal condition of a country like the United States. Depression means a temporary breakdown in the economic machine, and is no more inevitable than the obsolete custom of getting out and getting under broken-down automobiles. Before motor manufacturers had mastered their problems, breakdowns on the road were normal occurrences. They no longer are.

The chief emphasis in the Hoover stabilization program, which was articulated through a series of conferences with the first men of industry, transportation, public utilities, banking, and labor and later at a larger meeting at the National Chamber's headquarters, was that the decisions of executives constitute a major factor in the business cycle.

Mr. Hoover, as a student of the history of American commerce, knew that past depressions usually followed stock exchange crashes. But as a realist and an engineer, Mr. Hoover felt that there were in the current economic setting reasons to believe that business progress could go on, provided business men cultivated the will to prosper. In the past,

after economic spasms, there was usually a disastrous period of hesitation, during which executives generally held back to see what others would do.

Translated into human terms, such hesitation meant unemployment, and in economic terms unemployment contracted purchasing power, thus unloosing a vicious circle of new depressing influences.

Mr. Hoover's aim was to break down the psychological barrier to a continuation of the business momentum—and his method was to point out to analytical executives the strong points in the situation which warranted confidence. Mr. Hoover was impressed with the superabundance of credit available at declining interest rates, with the freedom of commodity prices from inflation, with the absence of abnormally large inventories, with the lack of car or labor shortages—in fact with the absence of the usual symptoms which in the past preceded major business breakdowns.

Believing that the creative spirit of American business could not be nourished on mere reassuring statements, the Chief Executive used the prestige



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RICHARD WHITNEY



WITH E. H. H. Simmons, president of the New York Stock Exchange, absent in Hawaii, Richard Whitney, vice-president, found himself in the pilot's seat when stocks went into their recent tailspin. He has been talked of as a successor to Mr. Simmons if the latter should see fit to retire from the position

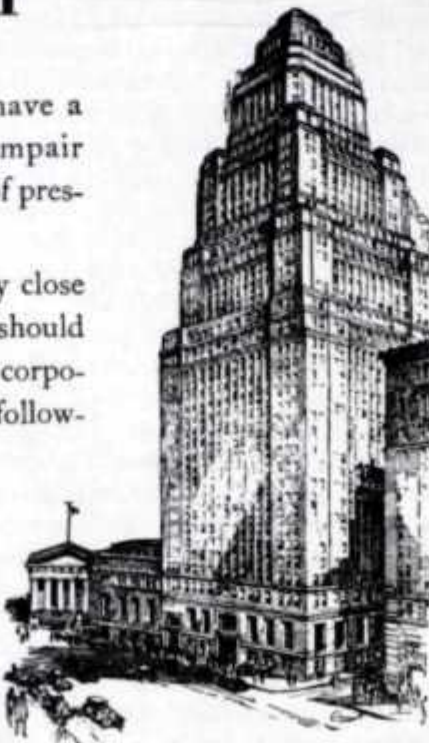


# Important to Stockholders of Close Corporations

Most close corporations have a weak spot which may impair future success regardless of present good management.

In his own interests, every close corporation stockholder should picture the future of his corporation in the light of the following developments:

**WHEN** *death*  
*removes an impor-*  
*tant stockholder—*



*How* will his heirs be compensated for his interests?

*How* do you and the other stockholders of your corporation plan to retain his interests among yourselves?

*How* desirable would it be to find unknown, outside interests as large stockholders, because *you had not planned* to purchase the interests of the deceased?

*How* much would it be worth to you to be *assured* of an uninterrupted business in such a case as this?

A definite solution of the problems these questions raise in your mind is desirable.

Our booklet, "To Officers of Close Corporations," outlines a remedy for this *serious close corporation weak spot*. Send for a copy today.

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of his office and his personal leadership to initiate a series of forward-looking business projects which would in themselves contribute substantially to continued business activity.

In effect, the President asked business leaders to cease issuing optimistic statements, and instead express their confidence with contracts for plant extensions, for new rails and equipment, and for other necessary permanent expansion.

For the first time in history on a nation-wide scale, the practical man took over the remedial formulae of academicians, and determined to use permanent construction as a balance wheel for stabilizing the situation. The corollary of Mr. Hoover's program of speeding up public and private construction in time of transition is to retard such activities in times of abnormally large consumption, or in times when there is a boom.

## Government and business join hands

♦ UNTIL recently theoretical economists stressed public works as the stabilizer. But Mr. Hoover, recognizing that private capitalism, rather than state Socialism, is in vogue in this country, realized that the volume of the building program would not be sufficient to prove a determining factor in the business cycle unless Government and private industry would join hands in a common adventure. The Federal Government itself is the largest single spender, but its outlays are small when measured against the joint expenditures of all private enterprises.

Private corporations are organized for profit, and can achieve their corporate purposes only by going ahead. They are willing to proceed as soon as they realize that others are ready to do so. Whatever savings in construction costs might result from waiting and causing a depression would be far more than offset by the lost opportunities for profits in the regular activities of the corporation.

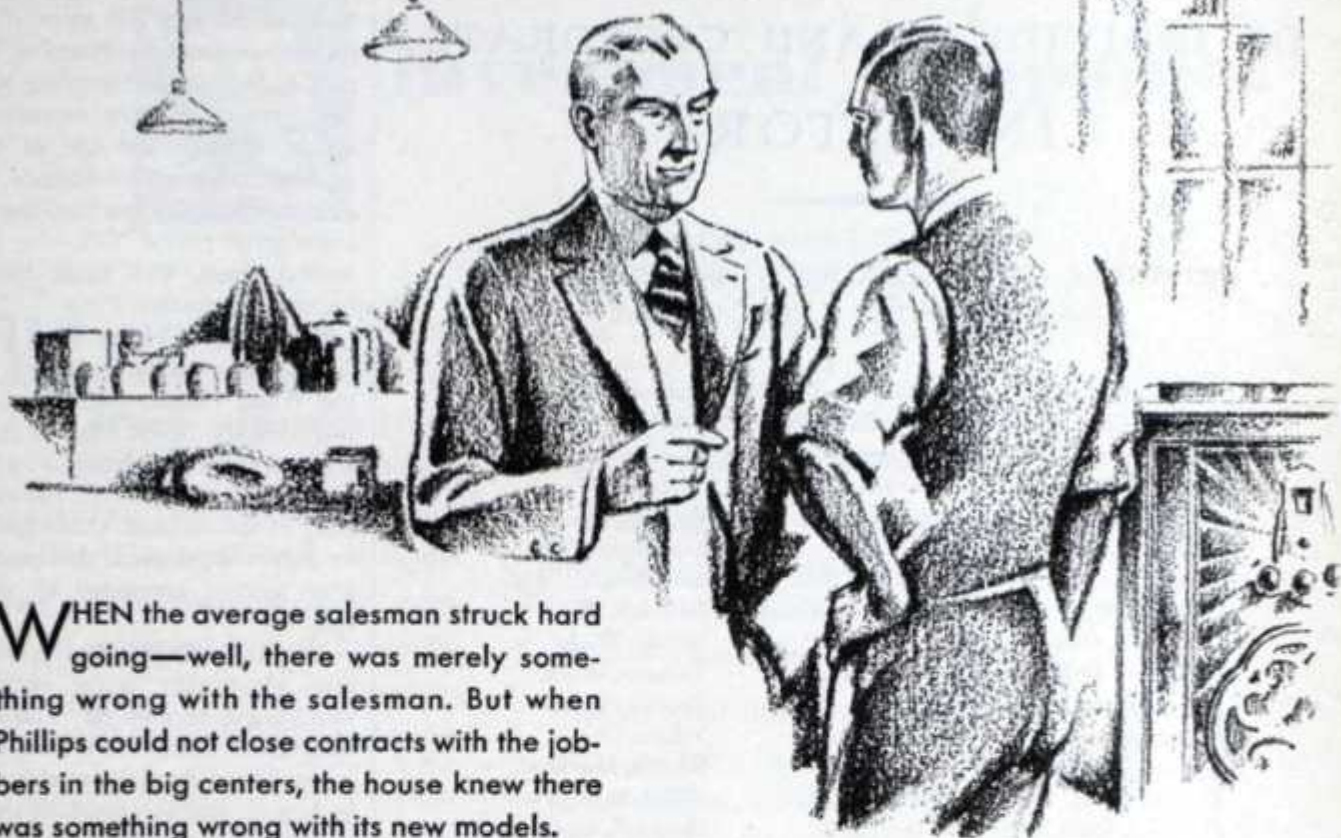
To a greater extent than ever before in history, the business of the United States has become institutionalized, and the fate of the giant corporations is interwoven with that of the country.

Moreover, since embarking on large-scale instalment finance, the corporations have a direct self-interest in preserving the opportunities for employment of vast numbers of their individual debtors.

Even industries, such as steel, which had no commerce with new methods of consumer finance, are interdependent



# "When Phillips can't close 'em— that means a change in models!"



**W**HEN the average salesman struck hard going—well, there was merely something wrong with the salesman. But when Phillips could not close contracts with the jobbers in the big centers, the house knew there was something wrong with its new models.

And so it turned out. Fortunately, the season was as yet scarcely under way. There was still time to locate the trouble—to make the necessary changes—and to get the new line into production. It meant work day and night; and, of course, a lot of expense.

"This means, I suppose," said the treasurer, "that we draw upon our bond reserves?"

"It does," replied the president. "That's what they were created for."

In many a situation of this kind, the exis-

tence of adequate and properly designed reserves has meant all the difference between a year of near-disaster and a year of comparative success. Experienced counsel in regard to reserves and their most advantageous investment is a part of our service to corporation investors. Business executives are invited to investigate the facilities we offer.

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on industries, such as the automobile trade, which have flourished by means of the instalment plan.

## Oiling up the business machine

• **THERE** is a growing recognition that human wants are insatiable and that business can and will go on if the purchasing power of consumers is maintained. Instead of becoming victims of fear waves, business executives have sought through the use of their organized collective intelligence to lubricate the business machine through the transitional period, following the stock market crash, with faith, based on a sounder economics.

Of course, as Henry Ford took occasion to point out when he was called to the White House, the lull in business preceded the Stock Market crash, and was not to be regarded as a consequence of it. The real turn in business came early in the summer. Commodity prices in July started on a decline which in four months amounted to seven per cent.

The automobile industry, which had been abnormally active early in the year, began to ease off. The construction trade, which for a year had been gradually receding, slumped significantly in August, and as a result of the change in building and in the manufacture of automobiles the steel industry began to stop making new high records.

Julius H. Barnes, chairman of the Chamber of Commerce of the United States and chief aide of Mr. Hoover in conducting this vast economic experiment in seeking to maintain economic stability, in referring to the pivotal construction industry, pointed out:

"Business hesitation generally follows a recession in the construction industry by a period of eight to twelve months. This is because construction shrinks when money rates advance, and inevitably the same influences affect other industries. That is why in the construction industry the credit reservoir will shortly seek its old employment in building construction.

"In this connection, and for those who fear that residential construction has overtaken the housing requirements of our people, it would be interesting to know that the people who study the market for modernized homes estimate that in 1930, one million such homes will be modernized to the extent of \$2,000 each. Multiply that and see what it means in building employment, in the purchase of kitchen and bathroom fixtures, in new house furnishings, entirely apart from any of the building



# World-wide diversification



## ... applied by these investment companies

**T**HE investment companies of the general management type in the American Founders group for years have invested in bonds, preferred stocks and common stocks, choosing their investments after careful research in the principal security markets of the world, and among the issues of various governmental authorities and many private enterprises.

A recent consolidated summary of the investments of the group, excluding cash, showed 42% in the United States, 11% in the British Commonwealth, 4% in Central and South America, 40% in Continental Europe, 3% in Japan and other Asiatic countries.

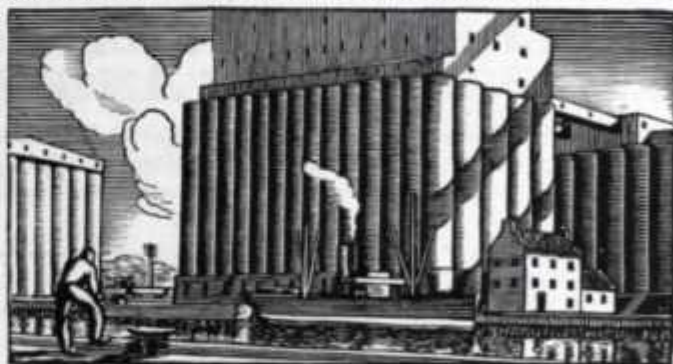
At the same date, 38% were in bonds, 6% in preferred stocks and 56% in common stocks.

The holdings were 18% government (bonds), 5% transportation, 14% public utilities, 24% industrials, 7% mortgage bank (bonds), 9% banks and insurance, 23% investment and financial companies.

The American Founders group now has approximately \$60,000,000 invested in bonds. Consolidated resources are \$200,000,000.

Additional information may be obtained from bankers and investment dealers, or from Founders General Corporation, 50 Pine Street, New York City.

DECORATIONS BY ROCKWELL KENT . CUT IN WOOD BY J. J. LANKES



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## A MESSAGE for 1930

WE HAVE faith in the stability of business and agriculture in the United States — faith in the constructive leadership of the captains at the helm — and faith that the decade to come will be even more prosperous than the past three in this great century.

Those who agree with us are *now* investing their surplus income in sound American securities. We invite you to do the same and offer for your service the complete facilities of our organization.

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expansion, but only the improvement of American housing."

#### Way well paved for program

♦ PUBLIC opinion was prepared in advance for the Hoover stabilization program by the report of the committee on Recent Economic Changes, of which the President was chairman; by "The Road to Plenty" by Waddill Catchings, investment banker, and William T. Foster, economist and head of the Pollak Foundation; and by "Making Everybody Rich" by Benjamin A. Javits.

Both Mr. Javits and the Foster-Catchings team had formed a mechanism for assuring industrial coordination, but the latter advocated government participation and sponsorship in such a venture. Moreover, Foster and Catchings insisted that the movement be tied with the profit motives of corporations, whereas Mr. Javits implied that a certain altruism on the part of business executives was necessary. Foster and Catchings held that, if business is assured that depression need not occur, it will embark on a forward-looking program as a matter of self-interest. In these recent conferences, Nature, as Oscar Wilde would put it, has been imitating art.

The prospectus for the present effort was contained in the Report of the Committee on Recent Economic Changes, which was signed by Mr. Hoover and such outstanding business leaders as Owen D. Young, Clarence M. Woolley, John J. Raskob, Daniel Willard and Lewis E. Pierson.

#### The plans of mice and men

♦ THE NATIONAL City Bank, largest commercial bank in the United States, under the leadership of Charles E. Mitchell, has sought to continue the policies of "open covenants openly arrived at" which were inaugurated by Frank A. Vanderlip, retired president.

In recent weeks of tumultuous change, Mr. Mitchell has experienced the perils of publicity. Returning from Europe just before Black Thursday, Mr. Mitchell issued a reassuring statement, indicating that the worst was over. The event failed to fulfill the prophecy. Later, November 7, an insufficient number of proxies were on hand at a stockholders' meeting of the bank to ratify the proposed merger with the Corn Exchange Bank. The intervening Wall Street crisis had rendered the proposed terms of the deal unattractive to National City, which became a target of

## SECURITY-FIRST NATIONAL BANK OF LOS ANGELES

A consolidation of Los Angeles-First National Trust & Savings Bank and Security Trust & Savings Bank, two of the oldest and largest banks in Southern California

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President and Chairman of the  
Executive Committee

HENRY M. ROBINSON  
Chairman of the Board

Security-First National is fully equipped to do every kind of banking business and has branches in 61 communities, extending from Fresno and San Luis Obispo to Imperial Valley.



FRESNO

SAN LUIS  
OBISPO

LOS ANGELES

IMPERIAL  
VALLEY



criticism for standing on its legal rights and refusing to ratify the agreement.

The collapse of the deal started irresponsible reports to the effect that the stockholders were dissatisfied with the management of the bank, and in accordance with the policy of open publicity Percy A. Rockefeller, on behalf of influential stockholders and directors, stated that the report that Mr. Mitchell was to retire was "too absurd to be considered by any sensible person."

The official apology of the bank regarding the Corn Exchange incident appeared in the December monthly letter, which set forth the statute governing a merger between a national bank and a state bank. Of course, the detail which prevented the deal from going through was the alternative offer of \$360 a share for Corn Exchange stock, instead of the exchange of one share of Corn Exchange stock for four-fifths of a share of National City stock.

Although the City Bank apologia does not specifically call attention to this fact, the statute does not require a cash alternative basis.

If the two banks had literally followed the provisions of the statute instead of going slightly further than the statute required, such terms as would have stood up through the financial storm could have been formulated.

The statute provides as an alternative for a stockholder dissenting to the exchange-of-stock basis that the stockholder "be entitled to receive the value of the shares so held by him, to be ascertained by an appraisal made by a committee of three persons, one to be selected by the shareholder, one by the directors of the consolidated association, and the third by the two so chosen; and in case the value so fixed shall not be satisfactory to such shareholder he may within five days after being notified of the appraisal appeal to the Comptroller of the Currency, who shall cause a re-appraisal to be made, which shall be final and binding."

Hindsight demonstrates that the statutory arrangement was wiser than that voluntarily entered into tentatively by the officers of the two banks. The willingness of the absorbing bank to offer a fixed price for shares of the other bank obviously shows that it had no prevision of the spasm which took place soon after in security prices.

In giving its defense, the National City Bank stated the essence of its case in these words:

"The essence of the plan was an exchange of National City shares for Corn Exchange shares and a merger not only



MERGED  
MAY 6, 1909



## Stock Transfers in the New York Securities Markets

A VITALLY important phase of the work of the New York securities markets is the protective service to investors and corporations performed by organizations such as the Guaranty Trust Company, in safeguarding and expediting the transfer and registration of stock.

During a recent typical ten-day period the Guaranty issued on *transfers* more than 282,000 certificates, or at the rate of more than 28,000 a day; it also *registered* more than 356,000 certificates, an average of more than 35,000 a day. These transactions represented the change of ownership of many hundreds of thousands of shares daily. All the required work was completed, with but few exceptions, within the regular time set by the customs of the market.

The proper handling of such a large volume of business calls for exceptional facilities, and it is an exceptional service which we render in every trust capacity and in every phase of commercial banking—domestic and international. We invite the inquiries of business executives.

## Guaranty Trust Company of New York

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*Capital, Surplus and Undivided Profits*  
*more than \$285,000,000*



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Founded in 1852



## Three Generations of Public Service

Founded in 1852, the Associated Gas and Electric System has been in public service over three generations.

From a small beginning with 28 gas customers in one community, the Associated System now provides electricity or gas to a total of 1,200,000 customers in 2,200 communities. It is a service providing conveniences and comforts that have grown to be necessities to a population of 5,300,000 people.

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## Associated Gas and Electric Company

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New York City



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Established 1899

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Chicago Stock Exchange  
Cleveland Stock Exchange  
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Philadelphia Stock Exchange  
Cincinnati Stock Exchange  
New York Cotton Exchange  
Chicago Board of Trade  
New York Curb Exchange

Cleveland	New York	Chicago	Philadelphia	Denver
Canton	Detroit	Boston	Columbus	Toledo
Kansas City	Louisville	Davenport	Milwaukee	St. Louis
Buffalo	Cincinnati	Akron	Massillon	Hartford
		Colorado Springs		

of assets but of the shareholding bodies and of the going business of the two institutions.

"It was expected that the consolidated body of the shareholders of both institutions would be interested supporters of the enlarged institution.

"It was not in contemplation that the entire body of Corn Exchange stockholders was to be bought out. But when the National City shareholders met on November 7, the decline which had occurred in the market prices of the shares of both institutions had created a situation in which it was practically certain that ratification of the proposal before them would involve an obligation to purchase all outstanding Corn Exchange shares within 20 days at \$360 per share, and at an aggregate cost of \$217,800,000. The market price of Corn Exchange shares November 7, was \$200 to \$215 per share and of National City shares \$295 to \$310."

If the outside commentator puts the most friendly possible interpretation on the incident, he must concede that even when banking giants are involved there is many a slip between the cup and the lip. Obviously, the merger epidemic raged as long as the financial public clamored to get shares of companies destined to consolidate.

### When stocks turn upwards

• IN REGARD to the stock market, professionals after the crash began to focus on the immediate trade outlook. Many would rather buy stocks on the way up a few points above bottom rather than venture and buy securities on the way down. Accordingly, when the real turn comes, the rebound is likely to be sharper than expected.

### Quiet Offices

IN the quiet office advertisement of a carpet manufacturer in the October NATION'S BUSINESS, Professor Donald A. Laird of Colgate University is quoted as saying, "The principal secret of having quiet in work places is to have generous amounts of noise-absorbing fabrics. Rugs and carpets are excellent noise absorbers." Professor Laird writes us that he feels that this quotation, apart from its original context, may lead some persons to believe that, in his judgment, "floor coverings will solve the problems of industrial noise." This, of course, is not the case. Rugs and carpets are only a useful instrument in deadening noise within offices.—THE EDITOR



## The Map of the Nation's Business

(Continued from page 35)

clearings and debits, mainly reflecting big stock speculation on the up and down sides, set up new high record for the year. Municipal bond sales are an exception in showing a decrease for the year of eight per cent, whereas new corporate capital issues are 10.8 per cent above 1928 to date.

### Chain stores show big gain

MAIL-ORDER houses in November gained 19.5 per cent over the like month a year ago as against a gain of 24.6 per cent in October. Last year there was a gain of 20 per cent in November over November of 1927. Chain-store sales show a 24 per cent gain over last year following an increase of 18 per cent in November, 1928, over 1927.

Department-store sales for November show an increase of three per cent over the like month a year ago, with a gain of 2.8 per cent for the year, this following a one per cent gain in 1928 over 1927.

The position of commodity prices of late has given rise to interesting speculations as to possible future developments in industry. When the stock market was declining in October and November, all grains and cotton speculatively dealt in showed sympathetic weakness and likewise rallied when security markets steadied up. Wheat, however, has shown a sort of creeping advance after the quick snapback of ten to twelve cents shown as stock market pressure lifted and is again well above a year ago although not up to the high point of July, at which price apparently farmers should have unloaded as no doubt some did. There seems some evidence that Europe must buy more wheat after January 1.

On the other hand cotton has not rallied much and is three cents a pound below what it was a year ago, in this respect being different from most other farm products.

Recent price movements, however, have shown a drooping tendency, the index numbers dropping quite noticeably in October and again in November, with most groups and most commodities outside of grain and live stock declining. The December 1 level for all prices was, in fact, about the lowest in five years, which may lead to some revision of so-called "stabilization" theories.

## Distribution Is Important, Too

When public offering is made of a corporation's securities—in the form of bonds, stocks or otherwise—the character of the distribution is of the utmost importance. The market which the issue will enjoy depends in large measure upon the way in which the issue has been sold. And, obviously, a good market reflects credit not only on the security but on the corporation behind it as well.

The facilities of A. G. Becker & Co. for distributing high-grade securities will interest corporation officials who contemplate public financing for their company. Often underwriting opportunities have come to us very largely because of confidence in our ability to place the issues effectively. Our offices and retail organizations in New York, Chicago and other financial centers are in regular contact with thousands of investors, while as wholesalers we enjoy close relations with investment dealers in all parts of the country. These facilities for broad distribution and our distribution policies developed out of a long experience make for satisfactory markets.

We shall be pleased to confer with you about financing problems in your own business in which our experience and broad facilities may prove of service.

*Booklet entitled "Sound Corporate Financing," which sketches the service we have rendered a number of well known American Corporations, will be sent upon request.*

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Securities  
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# Success-



## while you are young enough to enjoy it

"I'm meeting Armstrong this afternoon at Ingleside—last chance for a little golf before we sail for Europe on the fifteenth..."

Pretty soft for Bob Carrington, you say—a lovely country home, golf on a week-day when the other boys are slaving at the office—a six weeks' trip to Europe with the family—and all this wonderful success while he is still young enough to enjoy it!

But why look with envy upon success well earned—especially when it is within your power to attain that same success?

"If young men in business only realized how immensely valuable are those early years, and how vital it is to get away to a flying start, they would make it an inflexible rule to devote several evenings every week to home-study business training."

One of America's foremost business men—an active director in a dozen big corporations—made that statement recently; and if you have the slightest doubt of its truth, you need only check it by the actual records of LaSalle-trained men, many of whom, though still in their thirties, are commanding five-figure salaries.

### Send for Free Book "Ten Years' Promotion in One"

"I'm determined to succeed," you say—and we do not deny that hard work and learning through day-to-day experience will eventually win you some measure of success. If success is sweet, however, is it not doubly sweet if it comes to you while you are still young enough to enjoy it?

And is it not a needless and tragic waste of years to continue at outgrown tasks, simply because you will not spare yourself the time to master those bigger jobs that command the real rewards of business?

*Ten Years' Promotion in One* is a booklet that shows you how you can save years that would otherwise be wasted. Sending for it has marked the turning point in the lives of thousands upon thousands of men—and the coupon will bring it to you FREE.

With this book we will send you, without cost or obligation, complete particulars of the training that appeals to you, together with details of our easy-payment plan.

Will you wait till the golden years of your life are fast slipping away—or will you set your path toward success while you are still young enough to enjoy it?

Prove that you mean what you say when you say that you want to get ahead—by what you do with this coupon NOW.

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I should be glad to learn about your salary-increasing plan as applied to my advancement in the business field checked below.

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Name .....

Present Position .....

Address .....

When writing please mention Nation's Business

## Find Out What Europe Wants

(Continued from page 56)

he launched his campaign, applying his American merchandising, carefully adapted and modified to meet the conditions in Europe. Today this product is one of the biggest selling soaps in Europe.

Don't misunderstand me. I am not advising against listening to European business men. By all means listen. But don't accept their judgment until you have checked up carefully. When you do check up, be sure to do so without that superiority complex that marks a certain class of American exporters. Instead, look for yourself and seek the advice of men trained in observing European market possibilities.

### Work brings success then, too

IT IS nothing short of amazing to see the inner working of some of the successful companies operating in Europe. When one has seen it, one is more likely to appreciate that success has come to these companies not by chance but by hard work, careful planning, and by keeping persistently at it.

Even companies old in the European field keep up their market survey activities. An American company which is the most successful marketer of oil in the world is an outstanding example of keeping everlastingly at it.

Before starting its 1929 merchandising campaign in France, and this after operating more than 50 years in that country, this company and its American advertising agency found it desirable to send investigators all over the field interviewing service stations, gas tanks, repair shops, automobile owners and prospects, storekeepers and housewives.

Some months ago I attended a conference at the European headquarters of a prominent American office appliance manufacturer. This company, the biggest in its field, has dominated the world market for many years. It is now exporting about 30 per cent of its total output and is planning to increase the export quota to 50 per cent.

The company has for years conducted its own market surveys. These serve as an excellent foundation on which to build further.

Intelligent and thorough planning of European merchandising is by no means confined to the old and large companies.

Some newcomers have shown equal prudence even though their resources are limited. One small company has broken into the English market and is making money in less than three years.

When closely analyzed, however, this performance is quite natural. It only called for a rare combination of thorough understanding, patience, and uncurbed enthusiasm. This comparatively small manufacturer of toilet goods sent his American advertising manager to England with instructions to keep his ears and eyes open and do nothing else for the time being.

In six months the advertising manager had worked out a suitable adaptation of the merchandising plan which had succeeded in America. The subsequent development of this enterprise in England has astonished even the most experienced business men.

I know of another small American manufacturer of electrical household appliances who is bound to succeed. While he leads the field here, his company is relatively small as companies go. His job in Europe is going to be tough and he knows it. He will have to blaze the trail, educate the people to this new blessing of American ingenuity, and he will have to ferret out a class of purchasers that probably will be entirely different from his American customers.

### He studies the problems closely

HE HAS sent his American general sales manager to Europe to devote his entire time to digging in. This man has been in Germany more than six months. He has started a small retail store to gain first-hand contact with prospects.

It is no trick to foretell which American manufacturers will succeed in Europe and which will fail. The formula for success in Europe is simple—"Find out what your customer wants; give him his money's worth, adapt your American merchandising methods to meet local conditions, make the investment necessary to do the job and stick to it."

European markets offer infinite possibilities for a great variety of American products. Here is a population of more than 400 million people. The Europeans have not the buying power of the Americans because most of them are poor. But the buying power of even one-quarter of the population is not to be considered lightly.



# What shall we do in the South?"



*The Inevitable Suggestion—"Take up the subject with The First National Bank of Atlanta."*

A MEETING of directors—a conference of executives—consideration of some important phase of policy or procedure in the South. . . .

Discussion—the urge to action—questioning—careful deliberation. . . .

Then, from someone present who through other affiliations has previously participated in the solution of a Southern problem—from a banking connection—from one source or another will come the inevitable suggestion, "Take up the subject with The First National Bank of Atlanta."

A great Southern bank with a national point of view, intimately acquainted with every aspect of Southern eco-

nomic life from 1865 until now, The First National has long been known for its definite and willing policy of interested co-operation far beyond the accustomed range of ordinary banking service.

"In many different matters vitally affecting our operations, your suggestions have guided us to more effective, more profitable methods," recently said the Southern head of a nationwide organization. "Ten years' progress in four—that's what your institution's counsel and co-operation have meant to us."

If you have a Southern problem, act on the inevitable suggestion. Take up the subject now with The First National of Atlanta.

## The Southeast's Largest Banking Group

The First National Bank	Atlanta
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First National Company	Atlanta
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National Exchange Bank	Augusta
Fourth National Bank	Columbus
Continental Trust Company	Macon
The First National Bank	Rome
Liberty Bank and Trust Company	Savannah

*Aggregate Resources More Than  
150 Million Dollars*

*Aggregate Capital, Surplus and  
Profits, \$25,000,000*

# The First National Bank of Atlanta

ESTABLISHED 1865



JOHN HANCOCK SERIES

## About Your Wife's Business

**Y**OU would not try to conduct your business without a system of accounts.

Your wife's business — the management of your home — also needs a method to keep it in good financial condition.

Let her make a trial of the John Hancock Home Budget, a system of household accounting, which is solving the problem of family finance for many wives.

Your local John Hancock office will be glad to send you a copy, or you may have one by addressing

INQUIRY BUREAU

*John Hancock*  
LIFE INSURANCE COMPANY  
OF BOSTON, MASSACHUSETTS

197 Clarendon Street Boston, Mass.

Please send me, Free, your Home Budget Sheet. I enclose 2c. for postage.

Name .....

Address .....

OVER SIXTY-FIVE YEARS IN BUSINESS

## Machines That Make Machines

(Continued from page 23)

taken, almost none at all.

Screws the size of a horse hair rattle into a hopper. Every screw absolutely true. Complete to the slot in the head. Who could buy a dollar watch except for the machine tools that made the machines that made the watch? Machine tool making is the key industry of the world.

"The cheaper the product the greater accuracy is demanded."

One machine tool for making other machines is big enough to hold a two-story house. The working table is 50 feet in diameter. It is 70 feet wide and 35 feet in working height.

Statistics were once collated by rows of stoop-shouldered men under eye-shades. If one man made a mistake of one figure they were null and void. By the time the long columns were added and checked they were mouldy.

Machine tools made a machine and now girls toss piles of punched cards into hoppers. Presently the statistics rattle out, new as new, absolutely true.

A 71 story skyscraper rose in record time in New York because a man in the West devised a new machine tool that made a new machine.

There must not be a scratch which might be the starting point of a break due to fatigue on the master rod of the radial engines used in airplanes. So they are machined by machines.

### Docile, intelligent creatures

SO MUCH for today. Superb and glorious and magnificent. These machines that make machines are such docile and intelligent creatures.

More and more electricity is being used each year. One machine at the show had 12 separate motors perched about on it. That machine had more than human intelligence. Half a dozen humans would have been needed to work its gadgets. Then one of them would get to thinking about his girl!

Each of the 12 motors ran a tool that did the accurate one-twelfth of the whole that was being done to a great hunk of steel, which coasted down the slide a completed part.

One gains a dim vision of what tomorrow may be. Not in detail but in the rough. This is a machine age. A steel age. Everything may be made of steel nowadays, cottages as well as skyscrapers, needles and refrigerators, streets and

bookcases. This may be the enthusiasm of a proselyte, but I've heard of steel skirts and steel paper for printing. Like the shopman of medieval London, I'm crying the steelman's wares:

"What d'ye lack, good people? What d'ye lack?"

Whatever it is, it shall be made for you. Nothing dismays these machine toolmakers. Bless your heart, they're looking for tougher jobs. An inventor in Montana twists his wife's hairpins and a little haywire and a few kinks from the old Ford into something new. It goes through the hands of mechanics and artists and lawyers and presently comes to a manufacturer. If he can have whatever it is made at a price ridiculously cheap everyone can get rich. But there is no machine to make it—

And that's a laugh. These machine toolmakers are looking for jobs by the side of which that is a week-end prank for a child. They keep their designing engineers on the road just as they do their salesmen. They go about among the factories crying "What d'ye lack, good people?"

### On the lookout for ability

NO better brains in the world than are to be found among these designing engineers. The toolmakers watch the boys at the benches as a Long Island pond owner scans his young ducks. They scout the technical schools for graduates who show ability. Once upon a time graduates went out from school to hustle for jobs at ten dollars a week. Now they are paid \$150 a month before the ribbons on their diplomas are soiled.

Nowhere in the world of industry is the competition in ideas more furious. They are a sporting lot, mind you. They put their completed work on the floor of the show where every competitor and every possible buyer may see it, take it apart, if they wish. But before that brand new machine went to the floor there had been months of desperate, secret, heart-breaking work done on it.

Even a slight advance means sales and toolmakers live by sales. American manufacturers are learning to junk antiquated machines. A new machine may pay for itself in a year. Some have paid for themselves in two months.

In my interest in the men I am getting away from the man. One of the 60 leaders spends perhaps twice as much an-

# Clean with

1930 finds a greater number of concerns than ever before eliminating production delays and reducing cleaning costs by the use of Oakite materials and methods. Whatever your industry, whatever your cleaning problems, Oakite materials and methods can be relied upon to effect economies in time, money, and effort. Write for booklets and information covering your industry. No obligation.

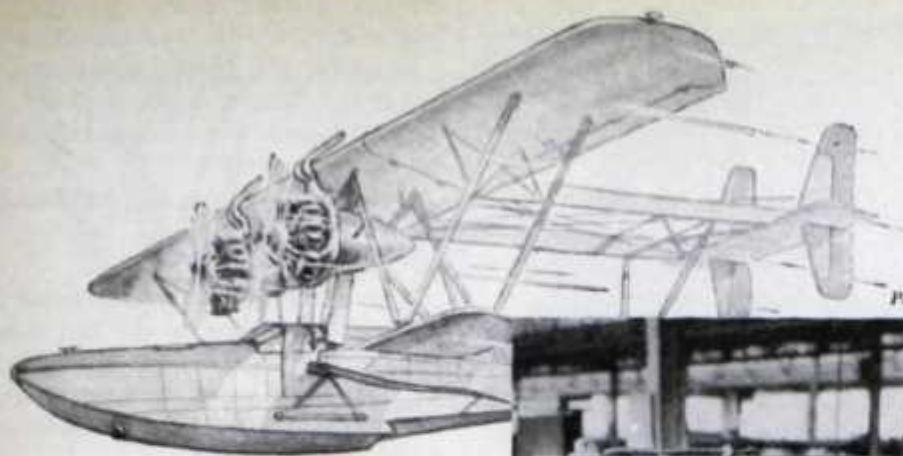
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Industrial Cleaning Materials and Methods





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*Perfection at lowest cost...  
the product of Simonds  
superior cutting edges!*

**I**T takes the toughest kind of cutting edges and abrasive grinding wheels to tackle the hard, wear-defying alloy steels used for airplane engines. It takes the toughest kind of cutting steel to bite into hard wood logs and transform them into valuable lumber!

It takes the best edge-holding tool steels known to modern science to do the hard jobs in Industry's mills and shops...steels that the Simonds organization has spent years in developing.

Today, the superior toughness of Simonds cutting edges is helping many industrial plants pro-

duce better products at lower costs. Doors, airplanes, micrometers...automobiles, binoculars, radios...shingles, ships, pencils—no matter what you make or what you use—it is quite probable that Simonds cutting edges have helped produce them. Constantly keeping pace with Industry's need for dependable cutting tools...constantly meeting the rigid requirements for faster production, Simonds now ranks as one of the largest and longest established industrial organizations in the country.

If you are interested in any of the products manufactured by Simonds plants, a conveniently located Simonds sales and service station will serve you promptly.

### SIMONDS SAW AND STEEL COMPANY

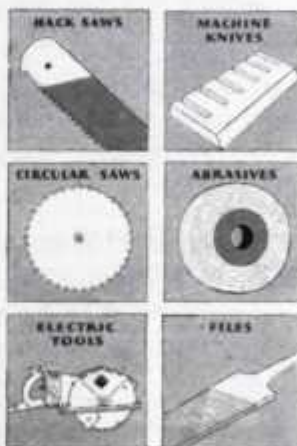
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Established 1832 • FITCHBURG, MASS.

Producers of Circular, Band, Metal, Cross-Cut, Gong and Drag Saws; Machine Knives; Files; Hack Saw Blades; Tool Holder Bits; Saw Tools; Discs; Snaps.

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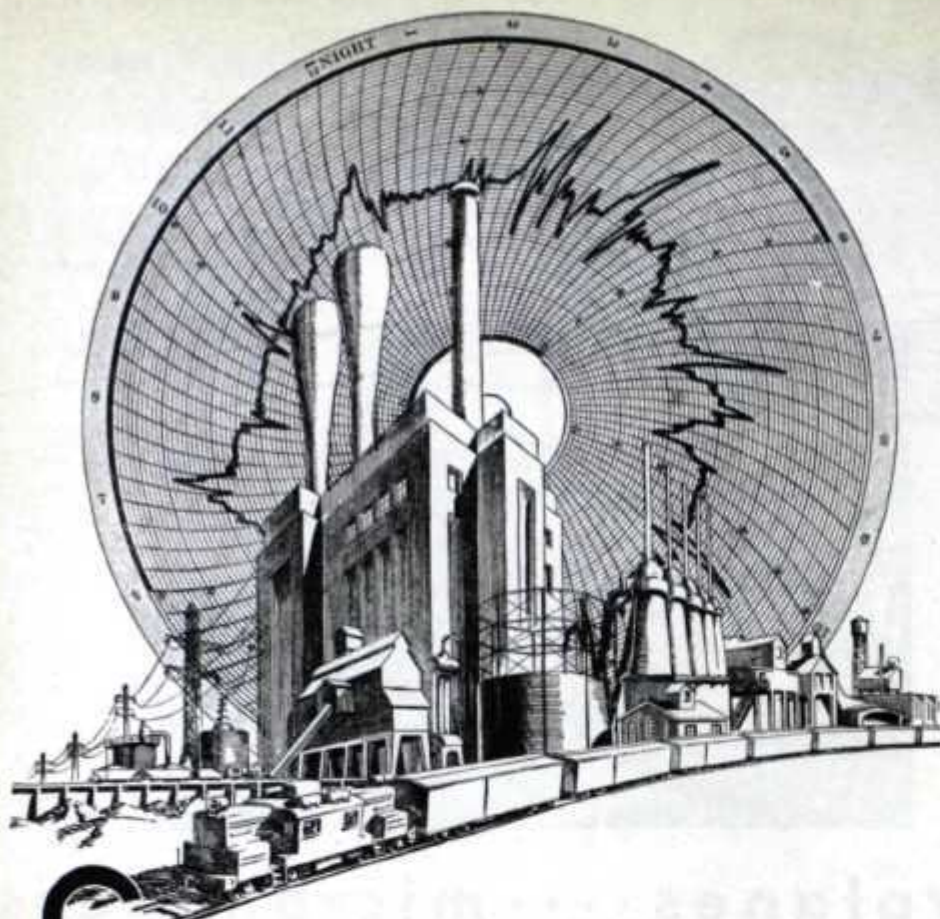
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World's Largest Saw Makers

**BACK OF THE EDGE . . THE STEEL . . . BACK OF BOTH . . SIMONDS**

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Hand in hand with efficient management has come the knowledge that money saved on manufacturing operations is as valuable as profits derived from shrewd purchases and sales. But no one can discover the real profits that lie in improved methods of operation without the analysis of the history of past performances so indelibly written by Recording Instruments.

Records of pressures and temperatures made continuously point infallibly to corrective measures...or indicate the high efficiency levels maintained by automatic control devices.

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HANCOCK**

# American

## INSTRUMENTS

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American Glass Thermometers	American Draft Gauges	Consol. American Safety Valves
American Dial Thermometers	American Gauge Testers	Consol. American Relief Valves
American Recording Thermometers	American Tachometers	Hancock Globe & Check Valves
American Temperature Controllers	Ashcroft Power Control Valves	Hancock Inspirators
American Recording Gauges	Ashcroft American Gauges	Metropolitan Injectors

nally in research as any rival. On the floor of the show his latest machine was a sensation. His friends congratulated him freely. They had gone through his obedient monster like watchmakers looking at mainsprings.

"How long were you at work producing it?"

"Nine months," he said.

Nine months from the first pencil in the first blank sheet to the first courteous purring in the show. His friends laughed. Two years, they intimated, would be more like it. Even then he would be making airplane speed.

"Only nine months," he said. "Nights and days and Sundays."

When he got the new idea he had but nine months in which to get ready for the show. Otherwise he would have taken the full two years. This talk took place at the Westinghouse dinner, and every man at the table stood head and shoulders above the mass of the industry. Every one represented a great, a super-great organization.

"We should work at that speed always," said he after a moment. "This taught me a lesson. We toolmakers have been too slow. We have dawdled—"

"Instead of saying, finish that job by such a day, we have asked 'When can you finish that job?' We must put on more speed. Develop more power. Gear a little higher. We have been too slow."

Too slow, in the master industry of the world, in which machines are made to make machines to work on jobs that have hardly taken form in the minds of their creators. In an industry that couples crystals to lightnings and whacks mechanisms around like work mules. And the men who sat about that table nodded, every one of them, and looked inward and said the man was right.

So we shall have more speed in machine toolmaking tomorrow.

Toolmaking has recovered from the effects of war. The layman thinks of profiteering when he speaks of war. But the war partly crippled the master toolmakers. Their great services were called on for defined and restricted operations and their normal progress was checked. Because the country could not live by shell noses alone lesser men went into the toolmaking industry. The return of peace found some of these men firmly established. Others were on their feet and fighting mad. They saw a chance ahead and went berserk.

"We have had some bad years," said one of the leaders. "But the wrinkles are being ironed out. The past year has been the best year the industry ever experienced."



# Why tenants move out

of apartments and business buildings heated by old fashioned steam heating systems

## And the Remedy

*Right now... Before another lease expires... Learn how three simple changes convert your present system into a modern fuel-thrifty vacuum plant*

**COLD DAYS.** Frigid early morning hours. Zero hours. How they menace rental values! It's then that many a dollar's worth of fuel is needlessly burned. Chilly messages from tenants. It is then that many a tenant decides to move. And it's then that rents begin to slip.

Is your building heated by a one-pipe steam system? If so, this advertisement, signed by a conscientious manufacturer, holds the biggest news you've ever read!

Since that heating system was installed, heating engineers have worked out radical improvements. Your present system is wastefully out of date.

Rip it all out? Put in a new one? No. That

is not what well-informed building operators and home owners are doing.

They are converting these one-pipe steam plants into the most modern type of heating systems, at a small fraction of the cost of a new system. Thousands of buildings are now being heated by vacuum systems, converted from old-type steam plants, by three simple changes.

In your city there are good heating contractors who specialize in this work. It is easy to locate one. He tightens up the connections to keep out air; replaces radiator air valves with the remarkable Hoffman Number 2 Vacuum Valves (with theft-

*If you own a house or building heated by steam you are vitally affected by these facts.*

proof locks); and places Hoffman vacuum vent valves on the basement mains, to clear the pipes of air.

That is all. The job can be completed quickly, without putting out the fire. You will then have a modern one-pipe vacuum system.

In a vacuum, water boils at low temperatures.

When the steam plant is converted into a Hoffman Vacuum system every radiator (even on the topmost floor) heats up a few minutes after drafts are opened. When the fire is banked the vacuum keeps radiators hot for three hours or more, just as though you had pressure up all the time. This means that in the coldest weather radiators stay hot all day long without frequent raising of steam pressure.

You can imagine the great amount of fuel thus saved. In many buildings and homes this saving is as much as \$5 per radiator every year.

The full efficiency of the vacuum system is the result of keeping air out of it. That is why the best heating contractor always installs Hoffman Number 2 Vacuum Valves on radiators. They let air out, then lock it out!

If you own a house or building of any kind, you are urged to investigate and analyze these rather startling facts. Let us send you the name of a nearby heating contractor who specializes in Hoffman vacuum-izing. This coupon, a post card or a letter brings you the name, and the Hoffman booklet which explains and proves the whole story. Hoffman Specialty Company, Inc., Dept. GH-1, Waterbury, Connecticut.



*This cross sectional photo shows how air is doubly locked out of the radiator. The combination of the vacuum check and vacuum diaphragm (which doubly lock out air) is found only in Hoffman Valves.*

## HOFFMAN Number 2 VACUUM VALVES

Open the drafts at 7 A. M. With the ordinary steam system it is likely to be 8 or later before radiators are hot. At 8:30 turn off drafts, by 9 radiators are probably cool.

Let your heating contractor vacuum-ize the system with Hoffman equipment. Then open drafts at 7 o'clock. At 7:15 your radiators are hot. Close drafts at 7:45. Radiators remain hot until 11 or later. With less fuel, you have hot radiators all morning, instead of a mere hour.

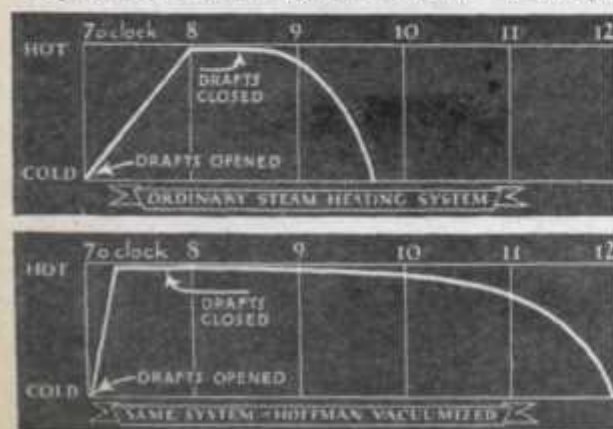
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Dept. GH-1, Waterbury, Conn.

Send me the facts about Hoffman Vacuum-izing steam heating systems, and the name of a good local contractor who specializes in this work.

Name \_\_\_\_\_

Address \_\_\_\_\_

I am interested in a House \_\_\_\_\_ Apartment House \_\_\_\_\_ Business Building \_\_\_\_\_ Approximate Number of Radiators \_\_\_\_\_







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# The Big Jobs Business Faces in 1930

(Continued from page 20)

weak link in such a combination can cause much trouble, and is more easily acquired than gotten rid of.

At least a possibility on the retail horizon is a price war between the chains themselves and between voluntary chain systems working against chains and against each other. Such moves would compel many manufacturers to define their selling positions more clearly.

The changes going on within chains, notably in the grocery field, will be watched with interest.

Reducing the cost of distribution in the face of mass production efficiency which makes for mass distribution and higher selling costs is the pleasant task which is in the cards inevitably for distributors. All the answers will not be in by the end of 1930.

determination of the reparation questions dealt with in the Young Plan, the constitution of the international bank, and the many shifts of gold and credit across frontiers, and their effects, will be outstanding.

## Our Trade Abroad

By E. L. BACHER

Manager, Foreign Commerce Department,  
U. S. Chamber of Commerce

IN the minds of foreign traders two topics promise to be uppermost during 1930—first, for the exporter, what will be the character and the strength of foreign competition? Second, for the importer, what will be the effect of a new United States tariff law?

The American exporter has to take merchandise produced under high American wage scales but with mass production advantages, and sell that merchandise in foreign markets against products produced with lower wage costs. In many export lines domestic and foreign prices are so delicately balanced that a change in any one of a number of factors might disturb the equilibrium.

Recently attention has been drawn to the arguments for and against the establishment of branch factories abroad. More than one exporter will be weighing, during 1930, the effectiveness of a branch plant overseas to hold export trade when the combined weight of advantages favorable to the foreign producer threaten to deprive him of a profitable overseas market. Similarly in certain lines where cooperative action appears possible to eliminate overhead costs and to present a united front to the foreign producers, exporters will be renewing their interest in combining under the Webb-Pomerene Law.

For the American importer the main consideration during 1930 will be the effect of any new tariff law which comes into force in the United States.

The importer of dutiable merchandise with a new tariff before him, has to re-adjust his domestic plans or even his domestic distributing organization to meet any increased duties on the products he handles. If a duty reaches a prohibitive height it may mean the discontinuance of his business. If the duty is materially lowered it may mean a wide expansion of his trade in the United States and possibly the spring-

## In the Field of Finance

By JOHN J. O'CONNOR

Manager, Finance Department,  
U. S. Chamber of Commerce

THE year 1930 will open with many financial questions compelling attention.

In the domestic field, will be a number of problems pertaining to the Federal Reserve System, particularly proposals for congressional investigation of the system and for changes in its policies and practices, as well as problems relating to chain and group banking, and the need of modernizing the national bank system.

The banking community will continue its effort to keep track of the frequent bank consolidations and the creation of holding companies in chain systems with far-flung components. These changes in the ownership and management of important banks in many communities will engage increasingly the attention of leaders of business and public opinion. Apart from the discussions over the three general types of banks—the unit chain-branch types—banks of all varieties probably will face a brisker struggle to produce profits in the face of rising costs and lower returns.

In public finance, the nature and amount of reduction in federal taxes, the treatment of the national debt, and the mounting costs and increasing debts of state and local governments will be foremost.

In the international field, the final

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ing up of new fellow importers to compete with him.

## Tasks of Insurance

By **TERENCE F. CUNNEEN**

Manager, Insurance Department,  
U. S. Chamber of Commerce

PROBABLY one of the outstanding subjects of discussion in the insurance field during the coming months will be the matter of investments of insurance companies. Opinion seems to be fairly well divided as to whether life insurance companies should be permitted to invest their assets in common stocks.

The Superintendent of Insurance of the State of New York has recently stated that he proposes to submit an amendment to the legislature which will permit the large life insurance companies operating in that state to invest their funds in certain stocks which have heretofore been prohibited.

Life insurance companies doing business in this country recently celebrated their achievement in issuing 100 billion dollars of life insurance. They are now seeking to reach the 200 billion dollar goal, which it is anticipated will be achieved within the next ten years. Representatives of life insurance companies are sharing greater interest in providing pension and retirement systems for aged and infirm employees of business and industrial corporations.

Demand for new types of coverage, particularly because of the development of the airplane, presents many problems in casualty insurance. Compulsory automobile legislation and financial responsibility laws have also presented problems in which casualty insurance is keenly interested. One state has enacted a compulsory automobile liability insurance law and eleven others have passed financial responsibility bills. These measures require motorists, under certain circumstances, to provide security for accidents either through an insurance policy, surety bond or personal security. New York, New Jersey, Maine and several other states have recently enacted legislation of this type.

The fire insurance business has been somewhat disturbed by the organization of new companies and their efforts to obtain business. Many of the larger and stronger fire companies have grouped under a single management with a view to reducing overhead and providing a better spread of risks.

About a year ago Congress passed the Jones-White Bill to aid the American Merchant Marine and provided

therein for the creation of a government-operated marine insurance fund to insure the equity of the Shipping Board in vessels upon which it had a lien through mortgage, mail contracts or other reasons. Marine underwriters contend that this fund has been operated on a more extensive plan than the legislation intended.

One problem of interest to the insurance institution as a whole is that of conservation. This is shown by constantly increasing activity in fire prevention, health conservation and accident prevention.

## What Factories Need

By **E. W. McCULLOUGH**

Manager, Manufacture Department,  
U. S. Chamber of Commerce

RECENT current events have not and, I believe, will not abnormally affect our prosperity, founded as it is on the country's fundamental soundness, which has been greatly improved since the War.

Steady work at good pay for those who desire to work and who make up the greater portion of our vast consuming army has so long been considered as perfectly obvious that we are getting a little careless about it, especially in prosperous times. More attention should be given to the greater stabilization of employment and the utilization of all willing to work, and more care exercised in preventing economic waste through the retirement of workers who have not exhausted either their mental or physical ability as producers.

Many concerns are already realizing that their plans for providing a more even flow of work equitably distributed through their organization are producing more satisfactory conditions and lower costs than artificial stimulation and so-called rush and peak periods. We have already learned much along those lines.

Another element in better planning, sales and production forecasting over extended periods—is not a new operation for many of our outstanding leaders in industry. It is worth mentioning here because we believe the operations of a majority of concerns still depend on what their unplanned individual efforts and spasmodic advertising may bring forth.

Our domestic field, our largest market, is definitely bounded geographically as an area which can be comprehensively and definitely surveyed.

Since profits do not definitely accrue



*Between East and West thru Historically interesting Country*



# 70,000 of us invite you to ride on our railroad



*The modern open-air way  
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**C**OMFORTABLE MOTOR coaches take you from the train-side in Jersey City, across the river with the inspiring view, and deliver you at any one of eleven points conveniently located in New York and Brooklyn. No bother with hand baggage; nor taxicabs. Solid comfort in the open air all the way. No additional charge.

**P**EOPLE think of a railroad as tracks and stations and locomotives and cars. That is true.

Our railroad has spent over four hundred million dollars in recent years to have the best equipment.

The things that money can do have been or are being done.

But there is another more important factor.

The finest locomotive can give you a jerky ride or a smooth ride. The finest dining car can give you a meal that is an irritation or a meal that is a pleasure.

A day on a train can be a lonesome separation from home, or it

can have the friendly atmosphere of home.

Men and women make the difference. *We* make the difference on our railroad—we, 70,000 men and women who operate the B & O.

Between New York, Philadelphia, Baltimore, Washington and the West our line runs through the most interesting historic country in America. Every ticket carries a stop-over privilege in the wonderful city of Washington at no extra cost. Ride with us on your

next trip east or west and see for yourself the things we try to do in extra courtesy.

*The* **B&O**

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## Leadership AND THE NEW YEAR

From a seemingly fantastic idea, in twenty-five years to the world's largest exclusive manufacturers of thermostatic instruments may seem like "luck" to some people—but to us it represents only the accumulated effort of right thinking and concentrated application.

We are proud as we look back and view our past, at the beginning of this New Year. Not in the spirit of boasting, but rather of serving. The road hasn't always been smooth for one of the hardest things to do is to help others to help themselves. Why you can sell "gold bricks" when you can't sell "gold dollars"—is an idiosyncrasy of human nature that is as hard to understand as to explain.

At this time of general retrospection; of mental stock-taking in all industries—does the progress of your company show the steady growth that you had hoped and expected, or are you barely holding your own, with each year's profits just about the same as last?

We are not efficiency experts, nor is our famous Sylphon Bellows—the most durable, flexible and sensitive expansion unit known—a panacea for all "ills"; but we do know that Sylphon Temperature Regulators

>>>>>



will end all your temperature control troubles during the years to come—and that they will help to place your plant in line with other industries for greater growth, efficiency and profit.

<<<<<

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until goods reach the consumer, manufacturing economies and savings cannot be insured without sales forecasting and budgeting.

In watching the processing of materials, the speeding up of production and the anxiety for constantly increasing volume, we cannot avoid the feeling that much elimination of waste is yet to be undertaken.

Recent events have produced or undoubtedly will cause hesitation among many classes of buyers which should spur us on to greater and more effective methods of saving in all production and marketing methods.

The haunting bugbear of overhead, both in selling and production operations, will compel further concentration so that step by step economies in 1930 will offset any possible slackening in demand and really insure a more satisfactory closing of that year than can be forecast now.

Therefore, I feel that the two primary urges before us are the insuring as far as possible of steady employment to those who will work and the intelligent planning and budgeting ahead of both production and sales operations.

## Production Problems

By W. DuB. BROOKINGS

Manager Natural Resources Production  
Department, U. S. Chamber of Commerce

IN THE face of record production of most natural resource commodities, the natural resources industries are acutely confronted with the problem of adjusting production to demand. Whether units within the industries can cooperate among themselves and whether they will receive the assistance of federal and state governments in such efforts toward self-regulation is a question of vital concern to the whole country.

The efforts of the petroleum industry in California to reduce the waste of an unreplaceable natural asset, the continued success of the curtailment programs in certain oil fields in Texas and Oklahoma, and the self-regulation of the copper industry with consequent stabilization at profitable levels will be watched with the keenest interest by all units of the natural resource industries.

When it is demonstrated that such groups can maintain a solid front against the disruptive "bear" attacks of buyers, the demands of contract purchasers and the internal pressure from royalty owners, bondholders and shareholders, then the other natural resource industries will fall in line.

Through their trade associations,



# AGAIN . . .



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trade practice conferences, codes of ethics, research institutes, statistical bureaus and export associations many of the industries are making an excellent start toward self-regulation.

Unlike many other industries which involve primarily only the producer and consumer, the natural resource group must at all times be cognizant of a third party, the public, and its representative, Government, which, feeling that it has a certain proprietary interest in the exploitation of national assets, insists that the possible needs of future generations and even esthetic and sentimental values be considered.

The sentiment is growing among many leaders of the natural resources industries that the Government is not consistent. Through cumulative tax burdens, it forces the premature development of resources, and at the same time, by raising the question of possible conflict with the anti-trust laws, it discourages cooperative actions which would result in orderly production and real conservation. The forest yield tax laws which a number of states have adopted, the California gas conservation law and the actions of the corporation commissions in several states indicate a trend in public sentiment which will receive the close attention of all the natural resource industries.

The fight over government ownership and control will continue to center principally on the power industry, but the coal industry will have its share of attacks also, and, after a decade of quiet, the specter is again looming in the timber industry.

Competition between industries will be increasingly keen, but with the intensive marketing studies and price readjustments now going on, the line of demarcation between commodity fields will be more sharply drawn.

## The Cry for Speed

**By A. B. BARBER**

Manager, Transportation and Communication  
Department, U. S. Chamber of Commerce

**EXTRAORDINARY** readiness to adopt new alignments and methods is an outstanding trend in transportation and communication. As in other fields the pressure is for better and quicker service as well as lower costs to meet competition and enlarge operations.

Railroad use of motor transportation to replace nonprofitable, short-haul, less-than-car-load freight and branch line services is on the increase. Wide variety

in public requirements and tastes is being met by railroad bus services paralleling their own lines and by co-operation of air and rail. Air transportation, though expensive, offers savings in time that far offset the cost and that are just beginning to be realized.

Improved highways are increasingly demonstrating a high investment value shown in reduced transportation costs, enlarged revenues from "user" taxes and general public benefits. Greater attention will be given to planning highway layouts and adapting roadway types and widths to meet requirements ranging from the farm-to-market service road to the high-speed, through highway with stop-sign protection and even with grade separations.

## Better communication service

**IN TELEPHONE**, telegraph and cable, long years of development and experiment are now bearing fruit in service which truly approaches the instantaneous. There are yet legal obstacles to consolidation of radio and wire communication in the United States, but its desirability in the public interest is gaining wider recognition.

Rail-river cooperation has not thus far materialized on a large scale. There is still wide diversity of view as to the relative cost of transportation by these two mediums, yet railway leaders express readiness to make the most economical service available by interchange arrangements with equitable divisions between rail and water carriers. They point out, however, that taxpayer costs as well as other costs should be taken into account. Meanwhile there are beginnings of what may grow into extensive direct interchange arrangements between river and motor carriers.

Understanding and teamwork between shippers and rail carriers have contributed to elimination of recurring car shortages and embargoes, while better and faster service is being provided with 100,000 fewer cars than a few years ago. Efforts are now under way in an increasing number of centers to reduce rate litigation, expensive in itself and much more so through the uncertainties and delays arising from the overburdened dockets of the Interstate Commerce Commission.

New trends are being recognized in ocean shipping and, just as the railways are now running most of their freight trains on fast regular schedules, so the ocean shipping lines with the aid of mail contracts are now constructing and preparing to construct many improved liners for freight as well as passengers.



## THROUGH THE



## EDITOR'S SPECS

**J**UST what ethics are involved in the matter of reprinting letters of comment from readers of a publication such as NATION'S BUSINESS?

Does the writer of an informative and interesting epistle expect to find his message staring back at him in the next issue of the magazine? Does such an expression become the property of the editor? Nice questions, these; questions which are not answered similarly in every case. NATION'S BUSINESS leans backward in that it does not publish unsolicited comment without the permission of the writer, because in some cases publication conceivably might place the writer at a disadvantage.

By no means all remarks about the magazine would be interesting to the general reader. These, however, are often the most valuable to the staff because of the editorial suggestions contained. The most thoughtful action which a reader can take when "writing to the editor" is to include such a phrase as "You may print this if you think it would be of interest." That saves postage and the time consumed in waiting for a reply.

The letters which fall into the "you-don't-dare-print-this" class are becoming less frequent. Just why this should be so we are unable to explain satisfactorily. Perhaps a liberal editorial policy which includes an eagerness to present the conflicting views in major controversies is in part responsible for the decline of such daring comments. The spirit in which such a note is penned always reminds us of a small boy who confidently says, "You wouldn't dast." Our impulse is to reply in kind, perhaps even sticking out a belligerent tongue at the darter. Usually we suppress the impulse and print the letter instead.

WILLIAM McFEE'S article, "Ships, Sentiment, and the Balance Sheet," in which he told some of the difficulties American shipping faces, drew forth both protest and approval. Stalwart,

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WAPI — Birmingham, Ala.  
WRMB — New Orleans, La.

KPRC — Houston, Texas  
WOAI — San Antonio, Texas  
WKY — Oklahoma City, Okla.  
KTHS — Hot Springs, Ark.  
KOA — Denver, Col.  
KGO — San Francisco  
KECA — Los Angeles, Cal.  
KGW — Portland, Ore.  
KOMO — Seattle, Wash.  
KHQ — Spokane, Wash.



no matter  
how short  
your stay



Management  
UNITED REALTIES, INC.  
D. R. LANE, President  
GEORGE E. ALLEN,  
General Manager



Just ten minutes from the center of the world's most important city—Wardman Park offers busy executives who visit Washington a unique combination of luxurious, metropolitan hotel life and the relaxation and sports of a week-end in the country—riding, golf, tennis, swimming. The very fact that Wardman Park attracts as permanent residents the discriminating and widely traveled leaders of Washington's social and diplomatic life is best proof of its ability to make your Washington visit delightful—no matter if it be a day or weeks. Many manufacturers, bankers, merchants, professional men and business groups choose Wardman Park for their annual meetings because of its complete facilities and isolation from distracting influences and because of Washington's many points of interest. Wardman Park maintains a special department for the planning of these. A letter to the hotel will bring full details.

## WARDMAN PARK HOTEL WASHINGTON, D. C.

romantic, young-old Robert Dollar writes from San Francisco:

From my own experience I have been compelled to go into buying and selling merchandise so as to get cargoes to carry both ways. We had tremendous difficulty getting our merchants to trade in foreign countries; they preferred domestic trading.

I am pleased to say that this is changing and our merchants are out now and right on the job. The British trade was very limited so they went out in a big way for foreign trade, thereby giving the British ships a great cargo business.

It has always been a problem of the shipowners to get their crews to remain with them steadily, but conditions are improving right along.

FRED NELSON CARLE, of the staff of *Commerce and Finance*, who styles himself "an ex-Canadian from where they still can't keep them away from the tall water and the taller the better," writes that Mr. McFee may be right in most everything he says, but he feels that Mr. McFee is too hard on our sons who try out sea-going. But read the letter yourself:

Mr. McFee is right when he observes that Americans are not sea-minded; right about the absurd and archaic regulations obtaining at our ports; quite correct about the importance of two-way cargoes; more than half right about the net value of high pressure publicity.

But he should not be too hard upon American two-trip sailors. Our youngsters in particular must contrast the glamor of clipper-ship days with those of the jazzy present. Any romance on a modern freighter? Anything more monotonous than life on a tanker or ore boat? They have little opportunity to get background, as on a coaster, fisherman or training ship—opportunities still common in European waters. Besides, fool government and union regulations handicap many who would stick, if they could once get the salt into their blood.

Let ten wealthy individuals establish an "endowment" for as many (new) American square-riggers, with at least eight bright, hand-picked apprentices on each, and the whole picture would change. (The subsidies of the sponsors would take care of the difference in insurance, etc., on long-run voyages, and the Department of Commerce could help out on return cargoes). Those 80 youngsters, Mr. Editor, would prove a greater leaven than ten times their number thrown headlong into steam without the lure, variety, and real training inherent in now-despised sail. There's your nucleus for a rejuvenated merchant marine personnel; and inside of ten years you ought to have duplicates of the old breed who knew how to barter and trade, and upon these we could draw for that shrewd shipping wisdom now almost extinct in our broad land. As to getting the right youngsters, why, exhibit a 46-sail beauty in a few of our old sailing ports, and you ought to draw a waiting list a mile long!

# HAMILTON CANADA

has more

## AMERICAN CAPITAL

invested within its boundaries than any other city in Canada. This is directly the result of the choosing of this city as the logical location for branches of American Industry.

*We enumerate a few*

International Harvester Co.

Westinghouse Co.

International Silver Co.

Stanley Steel Co.

Beechnut Products

Firestone Tire & Rubber Co.

and about 70 others

*Enquiries solicited—Confidence respected*

INDUSTRIAL AND PUBLICITY DEPT.

CITY HALL

HAMILTON :: ONTARIO :: CANADA

*It will pay you to locate in*

# HAMILTON



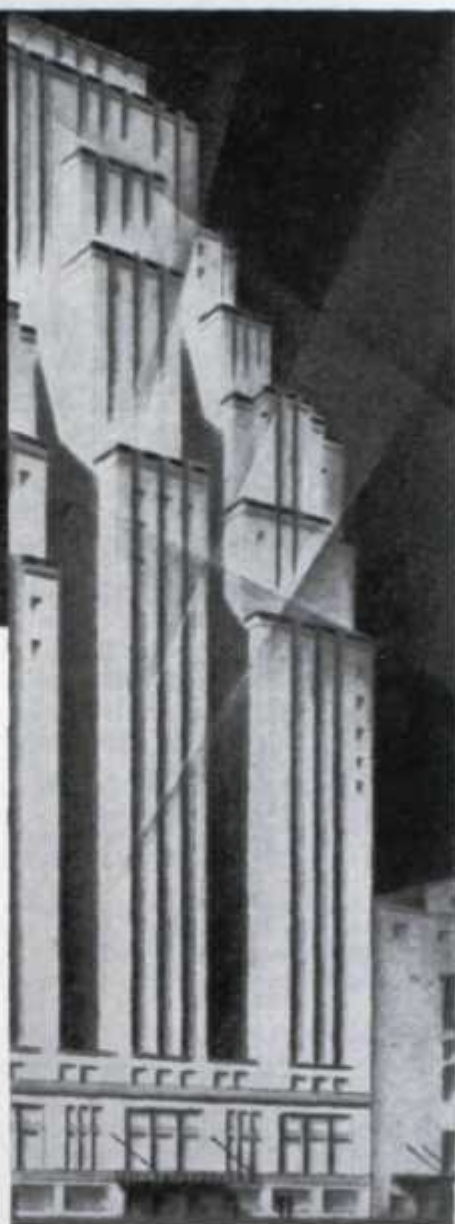
# Now Open

## Manhattan's Largest and Tallest Hotel

something **NEW**

under the sun?  
**YES** in hotels

The largest hotel in Manhattan and the tallest in the world... in the center of the brilliant whirl of the world's greatest city...the scene of vivid, exciting metropolitan life...43 stories of modern luxury and comfort...with rooms that are models of beauty and convenience...with four restaurants that give the most jaded appetite a new thrill! But more than all this—the New Yorker offers something *decidedly new* in hotels...an individualized service which makes you a *privileged* guest...provides you a friendly, informal hospitality that's refreshingly old-fashioned in spirit, strikingly modern in manner!



### Radio in Every Room

(Stromberg Carlson...Magnetic Speaker)

...and each of the New Yorker's 2500 rooms has both tub and shower bath, Servidor, circulating ice water, full length mirrors, French telephones...floor secretaries...direct tunnel connection to the Pennsylvania station...located in the heart of the midtown business district, near the theatres, shops and business...room rates \$3.50 a day and upward...suites \$11.00 and up...some suites have sky terraces.



Bernie Cassiano and his New Yorkers keep time to lively appetites at dinner and supper in the beautiful Terrace Restaurant...and you enjoy the same fine food and superior service in the Manhattan Room, Fountain Room and Coffee Shop.

# THE NEW YORKER HOTEL

34TH STREET AT EIGHTH AVENUE - NEW YORK CITY

RALPH RITZ

MANAGING DIRECTOR

*When making reservations at THE NEW YORKER HOTEL, please mention Nation's Business*





**El Paso**  
TEXAS

*In the Land of  
SUNSHINE  
and Better Living*

**A**KINDLY, healthful, outdoor-inviting climate has been an important factor in the development of El Paso...PASS CITY in the edge of the Southern Rockies, nearly 4000 feet above sea level.

**S**IX railroads, six airlines (including trans-continental rail-plane service) and ten important highways serve El Paso and its fast growing trade territory. From El Paso 275 manufacturers and 150 wholesalers and brokers serve their customers in West Texas, New Mexico, Arizona and Mexico.

Here is a pivotal point of the Southern Air route, designated by Army and Navy surveys and chosen by the Graf Zeppelin...here an important rail and plane Gateway to Mexico...here safe flying weather 360 days out of the year.

Here in 1929 \$15,000,000 in outside capital has been invested in doubling the capacity of utilities and pipelines...and \$10,000,000 more in other industrial expansions...bets wisely placed on the future rapid growth of El Paso.

*\*For 22 months El Paso has been IN THE WHITE on the map of Nation's Business. El Paso is growing, its industries are prospering, and there is room for others. May we tell you more about El Paso. Use the coupon! Today!*



20 STORY BUILDING NOW BEING ADDED TO THE EL PASO SKYLINE



Please send your new booklet: "El Paso in the Land of Better Living" and Industrial data to:

INDUSTRIAL DIVISION, Chamber of Commerce, El Paso, Texas.

Name \_\_\_\_\_

Address \_\_\_\_\_

## Power! More Things for More People

(Continued from page 25)

million horsepower is now available in the United States. But we could still use much more; thus far we have reached only the places that need power most or those that could be supplied most easily.

One result of the tremendous expansion that is coming will be the saturation of the more remote sections with electrical power. Electricity will invade the farms where a very large and important field is waiting for a power service.

### We live in an age of power

**THIS** is the power age. All our modern accomplishments lead back to it—rapid transportation, production on a large scale, and the adoption of labor-saving machinery. Applied power lifts more and more burdens from the backs of the workers. It performs many of the housewife's tasks. It not only saves labor, it performs tasks that no amount of human labor could perform.

Costs have been reduced, drudgery eliminated from unskilled work and wages in most cases increased. Production is greater. Greater production and standardized methods of manufacture mean a decline of prices, lower costs per unit. Purchasing power of wages becomes greater. Leisure is more widely enjoyed and the things that go with leisure are more generally desired. In a word, we have a higher standard of living.

These loftier standards have permitted us to enjoy greater freedom and have extended the so-called special privileges of the few to the many. General application of electricity carries with it increased benefits of both comfort and entertainment—easily and cheaply obtained. Folks with moderate incomes can enjoy the uses of electricity as well as the very wealthy.

### Power cuts commodity costs

**BUT** beyond all this is the fact that, as the use of power spreads, the cost decreases. The benefits of electrical power are not limited to your own personal use of electric power in your home or business.

They are reflected in all your other bills, for there is scarcely a commodity whose cost to you is not decreased by

**IT'S TIME  
YOU KNEW of this**



**NEATER  
STRONGER  
PAPER CLIP**

**Graffco VISE CLIP**

have an inner tongue that prevents papers slipping in any direction. 3 sizes hold 2 to 66 papers. Made of plated spring steel, and called the only perfect paper clip. At your dealers, or write

**GEORGE B. GRAFF CO.**  
80 Washburn Ave.  
Cambridge Mass.



**A FEW  
CENTS Give  
You FILING SAFETY**

**INEXPENSIVE ACCO FASTENERS**  
I protect your important papers and compel filing accuracy, thereby saving reference time of clerk and executive.

Two prongs on a broad base and a lock compressor firmly bind papers together. Can be used in any standard filing folder. The first filing operation is the last.

Write for samples, giving dealer's name.

**AMERICAN CLIP COMPANY**, Long Island City, N. Y.  
Rm. One Hundred One East, Toronto

**ACCO FASTENERS**



the use of electric power. It has become almost a natural resource. The larger it grows, the greater its benefits must be.

The industry will evolve just as rapidly as the public need requires. Its present growth is directly due to that pressure. It will develop its own type of management and machinery, and invent its tools as it goes.

### Vast future possibilities

OUR job now is to utilize the machinery that has been developed—the technique of power production, distribution and use. We cannot overestimate the social advantages that can result from it.

Looking into the future, the electrical industry should have freedom from interference so long as it serves adequately. The electrical industry is too great and its possibilities too vast to be endangered by minds not geared to modern industrial initiative. The public-be-damned policy which used to be characteristic of private corporations is now more generally found at the counters of government-owned concerns whose patronage does not depend on serving and pleasing the public.

Let us not put chains on our business men simply because they are growing or attaining to larger responsibilities and opportunities. We must face our future with what we've got—not what we'd like to have. Industrial progress is an evolution from one stage to another by gradual changes brought about by the vision of management in its efforts to meet the needs of the people.

### Need now to extend benefits

THE need now is to extend the benefits of electricity as rapidly as possible. The laws of growth must be permitted to take their natural course. If the industry as now constituted does not measure up to the need and the opportunity, some other way will present itself. The industry must not consider itself as by divine right the heir to the future, but must meet the needs of the people more than half way, even providing utilities a little ahead of the actual needs and reducing charges at every possible opportunity. We ought never to emphasize opportunity without an equal emphasis on responsibility.

If a unified national power supply system arrives, it will be because that is the medium that can serve us best. There is no reason to fear such a thing because no business can ever get bigger or stronger than the public.

# Did you ever work with one?



THIS advertisement is addressed to the executive who has come up through the ranks.

You remember the days when your desk was one among many in an open office. Buddie Smith always hummed as he worked and Basso Jones answered the phone in a voice that would carry from Chi. to Cheyenne without the aid of a wire. Yet you were required to produce accurate work . . . with despatch.

Privacy is a necessity for those who must concentrate.

Hauserman Movable Unit Steel Partitions are a practical solution of the problem. They are good-looking, economical and a property asset. You can rearrange them if conditions require and take them with you when you move. Mobility of partitions is as important to the single office as it is to the large group.

The Hauserman method of partitioning is more than the sale of panels, door and transoms. It includes planning the layout, manufacture, erection and perpetual service. Send us the coupon below and you will receive a folder that tells the whole story.



HAUSERMAN Partitions are made in five different types and a hundred different finishes. They are adaptable to executive and commercial offices, institutions and factories.

#### Planning, Sales and Construction Branches

NEW YORK	BOSTON	PITTSBURGH
ST LOUIS	NEWARK	HARTFORD
DETROIT	WASHINGTON	BUFFALO
CINCINNATI	CHICAGO	PHILADELPHIA

## HAUSERMAN

The E. F. Hauserman Company, Cleveland, Ohio

Please send me without obligation  
The Hauserman Method of Partitioning.

Name

Street

City

## PARTITIONS OF MOVABLE STEEL

OUR THIRTEEN YEARS EXPERIENCE IS OF VALUE TO YOU

When writing to THE E. F. HAUSERMAN COMPANY please mention *Nation's Business*.



# Index of Advertisers

January, 1930



## The Vital Factor in Advertising Success

THERE are four factors which determine whether advertising pays—first, the media; second, the type and character of "copy"; third, the soundness of the plan; fourth, Faith. And the greatest of these is Faith.

There are four kinds of faith—immediate faith, discriminating faith, continuous faith, complete faith.

Immediate faith means firm belief in the thing to be done. If you can't believe, don't do it.

Discriminating faith means crediting advertising with things that it does do, but not charging it with things that it can't do.

Continuous faith means faith this week, next week, next year, forever. The more I study the checking records of national advertising, the surer I am that the continuous advertiser is the one that makes the profit. The national leaders in almost any classification of trade show advertising curves which are comparatively straight lines, constantly ascending.

Complete faith means having a sound understanding of what advertising really is and the firm belief that no matter what happens, it can do the job. Complete faith means that advertising is vital to business success.

Of all the successful users of advertising that I have known, the most successful is a man who believed in it the most. He believed in it as an indispensable tool with which to tell everybody every place all the time all the things they should know about his product. His faith was enormous. His success was conspicuous.

B. E. CHAPPELOW, *President,*  
*Chappelow Advertising Co.*

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# NATIONAL ACCOUNTING MACHINES—

GIVE RESULTS NEVER BEFORE POSSIBLE ON  
WIDELY DIFFERENT ACCOUNTING WORK

## NATIONAL POSTING MACHINES

MEET THE  
NEEDS OF

HOTELS

STORES

FACTORIES

LAUNDRIES

CREDIT STORES

MAIL ORDER

SAVINGS BANKS

BUILDING LOANS



The  
National  
Accounting  
Machine

The  
National  
Posting  
Machine



## NATIONAL ACCOUNTING MACHINES

GIVE IMPROVED  
RESULTS FOR

BANKS

STORES

OFFICES

BROKERS

FACTORIES

RAILROADS

WHOLESALE

PUBLIC UTILITIES

**N**ATIONAL Accounting and National Posting Machines meet the accounting needs of widely different lines of business. Their flexibility and exclusive features enable them to give results never before possible with any form of mechanical accounting.

The National Accounting Machine handles every form of accounting in the modern bank, general office, store, wholesale house and other lines of business.

To all of this work it brings the advantages of a machine which is easy and simple to operate . . . in which every figure or letter written is always in view of the operator.

The National Posting Machine prints three records of a transaction at one operation.

This is one of the features that makes it an outstanding system for posting savings accounts, installment payment accounts, hotel front office accounts and any other transaction in which a receipt for the customer and a record for the business must be made.

National Accounting and National Posting Machines have saved thousands of dollars for hundreds of organizations. They have cut to a fraction the time required to get reports.

An investigation of what these machines can do may mean much to your business. Our representative in your city will be glad to give complete information on the machine best suited to your needs.

## THE NATIONAL CASH REGISTER COMPANY

World's Outstanding Producer of Accounting Machines and Cash Registers

DAYTON, OHIO



# Curtiss-Wright ports are open to the entire aviation industry



THE FIRST CHAIN OF AMERICAN AIR TERMINALS . . . NETWORKING THE COUNTRY

**C**URTISS-WRIGHT inaugurates the first nationwide chain of airports in the United States. All of these ports are within easy reach of great business centers—and under unified ownership and management.

In all of them, the entire industry is welcome. Space is for lease to transport companies, aerial photographers, railroads who will engage in air transportation, manufacturers of planes, of engines, supplies, and accessories, and fuel—all commercial operators and private owners.

Student instruction and local passenger carrying, however, are reserved exclusively for Curtiss-Wright Flying Service.

The executives of any business—every one concerned with or interested in the aviation industry—are cordially invited to inspect existing fields, which are indicated on the map above; and to call upon the executives of Curtiss-Wright Airports Corporation for further details concerning their present properties and their plans for future development.

On request—without obligation to you—we will send detailed information regarding any of these ports in which you may be interested.

Kindly address your inquiries to Dept. P-9, Curtiss-Wright Airports Corporation, 27 West 57th Street, New York City.

## CURTISS-WRIGHT *Airports*

.. 27-29 WEST 57th STREET . NEW YORK CITY ..

When writing to CURTISS-WRIGHT AIRPORTS CORPORATION please mention Nation's Business



# 52 widely scattered Dealers visited in 1 month by Telephone



A WHITEWATER, Wisconsin, flour and feed company visited 52 of its dealers in one month by means of telephone calls. Sales, \$29,958.89. Cost of calls, approximately \$80.

The use of trading area calls by business houses is growing so fast because it pays. It is quick and inexpensive to go by telephone. Men find that telephone calls get attention. They encourage prompt decisions. They enable transactions to be consummated in minutes. They enable each man to go farther and accomplish more.

Territory development and the telephone go hand in hand. Telephone calls and personal calls can be alternated. Towns that otherwise would be missed because of lack of time can be reached quickly and economically by telephone from central points. For buying, selling, developing good-will—the telephone will keep you in constant touch with your entire territory. Develop your business area to the full by telephone calls . . . *Quick . . . Easy . . . Economical*





# When the table talk turns to cigarettes —

the men smile quietly and say: "To smoke Camels is to know the real pleasure of smoking."

The preference of experienced smokers has made Camels by far the most popular cigarette in the United States.



# Camel

CIGARETTES